NOV 12 1920

Registered at the G.P.O., Sydney, for Transmission by Post as a Newspaper. Published Weekly.

THE

MEDICAL JOURNAL OF AUSTRALIA

(With which "The Australasian Medical Gazette," and "The Australian Medical Journal" are incorporated.)

The Journal of the Australian Branches of the British Medical Association

VOL. II.—7TH YEAR—No. 14. SYDNEY: SATURDAY, OCTOBER 2, 1920. PRICE 6D.

Surgical Instruments

We are pleased to announce that good general stocks of our Surgical Instruments have arrived and that regular supplies are now coming forward. Members of the Profession are cordially invited to visit our Show Rooms.

Allen & Hanburys (Australasia) Ltd.

Instrument Makers to H.M. Army and H.M. Navy

AUSTRALASIAN BRANCH:

B.M.A. Building : Elizabeth St., Sydney

The Disinfectant

Carbolacene

Made in England.

Cleanses and Disinfects in one act

Used by Doctors and all Hospitals.

In the sick room. Instantly destroys all germs.

For washing floors, paint work, sponging carpets, etc. Removes dirt, prevents disease.

In the Bath and for washing the hair

A wonderful healer of cuts and sores and skin eruptions.

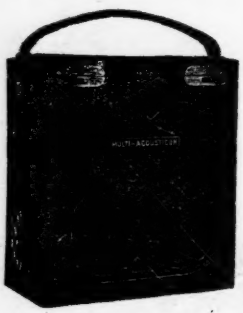
For washing animals, Destroys all vermin.

SOLD EVERYWHERE

Pint Bottles **Gallon Tins** **5-Gallon Drums**

SYDNEY:—Arthur Maston & Sons MELBOURNE:—Mitchell & Ballair PERTH:—Wm. Sandover & Coy.
BRISBANE:—Meylan & Chancellor ADELAIDE:—Prevost Selth & Co. LAUNCESTON:—Irvine & McEachern

The "Multi" Acousticon



For the VERY Deaf

Most powerful hearing device ever constructed. Four distinct electrical ears, working in unison, give articulation and strength.

For individual use in the home, office, at church, in court or theatre, or wherever great power is desired.

In handsome black leather covered case, 7 x 7 x 3½in.

Lamson Store Service **Co.** Ltd. Sole Agents for Australasia

SYDNEY: Daking House MELBOURNE: 475 Collins Street
BRISBANE: 113 Eagle Street ADELAIDE: Hindmarsh Buildings
W.A.—H. C. Little & Co.—351 Hay Street, PERTH
N.Z.—J. R. Proctor—200 High St., CHRISTCHURCH

THE MEDICAL JOURNAL OF AUSTRALIA.

VOL. II.—7TH YEAR. SYDNEY: SATURDAY, OCTOBER 2, 1920. No. 14.

Presidential Address.

SECTION OF OTOLOGY, LARYNGOLOGY AND RHINOLOGY, AUSTRALIAN MEDICAL CONGRESS, BRISBANE, 1920.

By **Herbert J. Marks, M.A., M.D., B.C. (Cantab.), M.R.C.S. (Eng.), L.R.C.P. (Lond.),**

Sydney.

A BRIEF SURVEY OF THE EVOLUTION OF OTO-RHINO-LARYNGOLOGY: REFLECTIONS AND SUGGESTIONS.

During the world conflict, when the minds of intellectual and scientific men of belligerent nations were turned to thoughts of war and their energies directed, on the one hand, to the invention of barbarous devices for the destruction of their fellow creatures and, on the other, to the discovery and fashioning of measures for the relief of the results of these devices, it was but to be expected that, apart from war surgery, the output of work in our specialty, as in other special branches of medicine and surgery, would be seriously curtailed.

In consideration of the enormous strides which had been made in our knowledge of the symptoms, diagnosis and treatment of diseases of the ear, nose and throat just prior to the war, the sudden set back to progress, occasioned by the world's upheaval in 1914, is to be deeply regretted.

The first meeting of our Congress in more peaceful times is a fitting occasion for retrospection and for gathering up and connecting, in a reflective mood, some links in the chain of progress, so that we may better realize and appreciate what has been done for us by our British pioneers, who through many years of hard and patient work in the face of adversity and discouragement, have contributed in a great measure to the uplifting of our specialty to the position it now occupies as one of the most important branches of medical science.

I think it may be said that with the dawn of the present century quite a new world of oto-rhino-laryngology came into being, nebulous at first, but to materialize within a few years as the great speciality which now occupies such an important position in and illumines the medical landscape.

There was a time within the recollection of some of us when hospital boards, both lay and medical, gave little consideration to and made scant provision for the needs of patients suffering from diseases of the ear, nose and throat. The treatment of these diseases was relegated to the care of a junior member of the medical or surgical staff who, in some instances, either through apathy or ignorance, performed his duties in a manner that brought little credit to himself or benefit to the patients under his care. Happily, though, there were even in those days some enthusiastic and conscientious workers attached to the staffs of a few general hospitals or special clinics, who in spite of opposition and discouragement by hospital boards and the profession generally, achieved through their perseverance and untiring energy such a degree of proficiency and accomplished such meritorious advancement of knowledge that within a few years they were rewarded for their good work by the realization of their ambitions. In the later years of the last century some light came to brighten the paths of progress, the light of recognition and encouragement. The more advanced hospital boards, realizing the value and importance of the work that was being accomplished in diseases of the ear, nose and throat and also recognizing the demand of the public generally for a more rational and scientific treatment of their sufferings by competent officers, set to work to make necessary and adequate provision by establishing special departments. New clinics were instituted, presided over by officers (selected for the most part from the staffs of the hospitals) who were beginning to turn their attention and devote their energies to the study and treatment of this particular branch of medical science.

The evolution was slow, for it was not until 1913 that all general hospitals throughout the United Kingdom were fully equipped with up-to-date clinics staffed with trained specialists. In the early history of our speciality it will be found that, while many hospitals were provided with an ear clinic in charge of an officer who gave his whole time to otological work, diseases of the nose and throat were treated by members of the medical and surgical staff, whose interests usually lay in quite different grooves. The work of otology altogether over-shadowed in importance that of rhinology and laryngology. This is no doubt to be accounted for by the more serious conditions that arise within the temporal bone demanding urgent and skilful treatment, also, I think, to the fact that the brilliant work of the great Politzer, of Vienna, was stimulating the minds of British surgeons to greater efforts in otological research. But as soon as the work of the pioneers in rhinology and laryngology received recognition, it was rapidly brought into line of importance with that of otology and it may be said that oto-rhino-laryngology then became established on a firm scientific basis.

Under such advantageous conditions for work, with the most eminent men of the day in charge of special clinics, working individually and collectively, in a spirit of harmony and confraternity, it was possible to look forward with great confidence to a future of many brilliant achievements in our particular branch of medical science.

What concerns and interests us to-day is the rapid advance of knowledge in this century, especially that which came about during the decade that intervened between 1904 and 1914. The advance at one time was so meteoric that one could with difficulty keep pace with the new developments. In our overflowing gratitude for this great progress we are rather inclined, I fear, to attribute its advent to continental sources only and to be forgetful of the work that has been accomplished by British surgeons.

The work of the British specialists in the first few years of this century was directed to some extent to the stabilizing of their newly acquired position in the medical world. Progress was, however, made in research work in bacteriology, pathology, ætiology, diagnosis and treatment of diseases of the throat, nose and ear. In connexion with diseases of the larynx, special mention must be made of the pioneer work by Butlin and Semon on cancer; by Semon on paralyses of the larynx and also by de Santi on the lymphatic distribution in the larynx, following up Cuneo's work now recognized as so important from a clinical and operative standpoint in dealing with intrinsic and extrinsic cancer. With these names must be coupled those of St. Clair Thomson, Dundas Grant and Wyatt Wingrave, as well as Lennox Browne, Lake and Jobson Horne, who added considerably to our knowledge of tubercular diseases of the larynx.

On the nasal accessory sinuses valuable work was accomplished by Logan Turner, Watson Williams, Lack, St. Clair Thomson and Tilley, especially for the relief of chronic suppuration of the frontal sinuses. The intranasal treatment in those days was considered ineffectual and particularly dangerous and even the various external operations extensively practised at that time were undertaken with a trepidation which is none the less great even to-day among British rhinologists.

In the domain of otology much time and attention was devoted to the working out of problems in the surgery of the temporal bone, in connexion with which must be mentioned the pioneer work on the mastoid carried out by Ballance, McEwen, Dundas Grant, Milligan, Lake, Whiting and Cheatle; that of Lake on the semi-circular canals for relief of intractable vertigo; while in connexion with intracranial complications of otitic origin the great achievements by McEwen and Ballance must not be forgotten. There was marked improvement in surgical technique and in the after treatment of operations in vogue at the time; the position to-day regarding these procedures is based in a great measure on the work which was then accomplished. Our knowledge of the pathology of the temporal bone, particularly tubercular lesions, was advanced by Jobson Horne, Wyatt Wingrave, McBride, Hovell and Milligan.

For our knowledge of the ætiology, pathology, diagnosis and treatment of labyrinthine suppurations, we are undoubtedly largely indebted to the Viennese school, but I fancy we are somewhat apt to disregard or belittle the work that was undertaken by British otologists. The trend of thought which underlay the conception of labyrinthine study and the manner in which the work was approached are not without interest. The study of labyrinthine diseases falls into three distinct periods, the first initiated by Jansen in 1897, the second by Hinsburg in 1902 and the third by Bárány in 1907. The classical work of Jansen attracted the attention of otologists throughout the world and stimulated research work particularly in the Viennese schools (and perhaps to some extent in the British), but Hinsburg's contribution was certainly responsible for the sudden and extensive efforts in the study of labyrinthine diseases by British surgeons, which became manifest shortly after the publication of his statistical paper in 1902. Between that date and 1907, Bárány's year, many interesting and important contributions were brought forward by the most eminent British otologists of the day.

As early as 1900 Ballance read a paper before the Otological Society of the United Kingdom, describing a case of radical mastoid operation in which he traced the disease into the labyrinth, the semi-circular canals being in part destroyed and the back of the vestibule opened; he subsequently practised his epithelial grafting in this case with excellent results.

Milligan, however, appears to have been the first to have studied the subject seriously. In a paper read before the Otological Society of the United Kingdom in 1904, he discussed the ætiology and treatment of labyrinthine suppuration, citing cases, and in 1907, in a paper published in the *British Medical Journal*, he referred to ten cases of labyrinthine suppuration on which he performed the bridge operation, now known as double vestibulotomy or the conservative operation of British surgeons.

In 1904 Whitehead also published a paper on the suppurations of the labyrinth, giving statistics of 691 cases of acute and chronic mastoid diseases operated on by himself and his colleagues during the previous fifteen years, of which careful records had been kept. Among these cases he found labyrinthine symptoms to be present in 27 or 4% and 11 or 40% terminated fatally from intracranial complications.

Between 1901 and 1908 occasional papers of no less interest on the vestibular labyrinth appeared by Lake, Cheatle, Milligan, Bull, Horne, Scott, Fagge and others, the most noteworthy, however, being that of West and Scott, of St. Bartholomew's Hospital, on the operative surgery of labyrinthitis, based on an experience of thirty cases, of which twenty-six were operated upon with a mortality of 17%. This paper, dealing with the whole subject of labyrinthitis in an exhaustive manner, was read before the Otological Section of the Royal Society of Medicine, 1908, and elicited keen discussion. The authors were congratulated upon their paper, which was regarded at that time as the most valuable which had been brought before the Section. During the discussion the President drew attention to the work in progress at the Viennese school and particularly to Bárány's caloric tests, which had not been dwelt upon in English literature, but which were regarded in Vienna as important and were supported by continental observers. He mentioned this work because it seemed to him to be based on false reasoning.

West and Scott had used the turning stool in some later cases. They regarded it as probable that rotation and similar tests would prove of extreme value in affording definite objective signs in cases of suspected labyrinthine lesions, but were unable at that time to do anything more than to accept an abnormal response as presumptive evidence of a damaged labyrinth. They had not had any success in varying the direction of elicited nystagmus by means of heat or cold, but would follow up the matter and hoped to make a further communication on the subject at a later date. This was done by Scott in his brilliant

paper on "The Problem of Vertigo," read before the Royal Society of Medicine in 1909, and in his Arris and Gale lecture of 1910 on the "Physiology of the Human Labyrinth." These papers entitle him, I think, to be regarded as a co-pioneer with Bárány in labyrinthine physiology.

It will be noticed, therefore, that up to 1908 only rumours of Bárány's work had crossed the Channel, but in 1909 it was brought into prominence through papers by Dan Mackenzie, Pike and Lake and in 1910 by Bárány himself in his communication which he read before the British Medical Association in London on "Diagnosis and Treatment of Infective Labyrinthitis." From this time onwards labyrinthine operations undertaken after Bárány's tests had been used in diagnosis, stimulated work on this region and British medical literature was flooded with reports of cases, recording a much reduced mortality.

While fully recognizing the value of Bárány's contributions, we must not forget the debt we owe to our British confrère, Albert Gray, to whom was awarded the Lenval Prize of 1909 for his very careful researches into the anatomy (human and comparative) of the internal ear, which met with appreciation and acknowledgement by continental otologists, while his recently published work "Oto-sclerosis" must be regarded as one of the most valuable additions to the scientific literature of this century.

As might have been expected, the greater part of the new work which made its appearance between 1904 and 1914, came from the continent, where for many years the development of specialities had been better fostered and a wealth of material had been always at hand for experimental purposes.

Otology.

Probably one of the most important advances in medical science has been the original work of Bárány, just referred to, on labyrinthine physiology and his clinical application of the study of the relation of the internal ear to the central nervous system. For this work he received in 1913 the prize of the year of the Society of German Neurologists; two years later, 1915, he was awarded the Nobel Prize in world-wide recognition of the great clinical importance of his work on the internal ear. This is one of the investigations the curtailment of which by the war is to be greatly regretted. It is to be hoped that in the interests of science he will be spared to continue his researches.

Isaac H. Jones, Philadelphia, however, has quite recently extended this research, to which he has given the new name of neuro-otology, in that it consists of an analysis of the internal ear and its associated intracranial pathways. Jones points out that this study not only opens up a new field for investigation in physiology, but also furnishes information of diagnostic value in our every-day examination of patients and that, although it is obviously an ear study and useful in the analysis of ear conditions, yet recent investigations have shown it to be of great value in general medical and surgical diagnosis and treatment. In his book "Equilibrium and Vertigo," he discusses clearly and concisely vertigo and the various conditions which bring it about, as well as the clinical application of tests in the analysis of symptoms. The disturbances of the vestibular apparatus can be definitely analysed by means of ear tests and cases of vertigo need no longer be regarded as vague or mysterious, nor can vertigo be used as a term wherein to cloak our ignorance of the many and diverse conditions of which it is only a symptom. Jones lays particular stress on the value of these tests in diagnosis and their importance to the general practitioner, neurologist, surgeon and ophthalmologist. He directs attention to the necessity of their co-operation with the otologist. This most important and fascinating work of Jones has received its hall mark of approval in a most commendatory review and criticism in the physiological journal *Brain*.

Reference must also be made to the work of Harvey Cushing, of America, on the cerebello-pontile angle or tumour of the *nervus acusticus* of importance not only to the neurologist and surgeon, but also to the otologist in the application of the labyrinthine tests in the analysis of symptoms for diagnostic purposes.

There has not been any great advance in the surgery of the mastoid. The Schwartze or conservative operation in acute cases of suppuration and the radical operation in chronic cases still hold their own. The Heath operation which has been so much advocated in acute and subacute mastoiditis and which may be adopted in certain selected cases, can in no way supplant the Schwartze, since it leaves the ear exposed to possible reinfection and is also liable to be followed by the formation of cholesteatoma. In the treatment of the mastoid cavity after the radical operation most otologists record beneficial results from grafting, employing the technique either of Ballance or Marriage; what may be claimed as a distinct advance in the after treatment is the use of bismuth-iodoform-paraffin paste, which renders the dressings practically painless and gives uniformly good results. Tilley and others advocate its use also in acute cases.

The operation of Bondy for the cure of attic disease is one to be recommended in suitable cases as much more scientific than the old one of curettage, which appears to me unsurgical and not devoid of risk. The modification of this method by Andrew, of Melbourne, has been most successful in his hands.

The operation of ossiculectomy, as performed by Hunter Todd in certain cases of chronic suppuration with caries of the ossicles, is still the operation of preference.

With regard to intracranial complications may be mentioned meningitis of otitic origin, for which many operations have been carried out in the attempt to relieve pressure and to establish drainage. I may instance repeated lumbar puncture, trans-labyrinthine drainage by West and Scott, drainage of the *cisterna magna* by the sub-occipital route by Ballance in 1911 (and later by Haines, of America), decompression and tapping of the lateral ventricles and Neumann's decompression operation with incision of the *dura mater* at the internal auditory meatus. Though there have been few recoveries in proportion to fatalities, yet the results demonstrate the possibility of more successful treatment. The treatment

of otitic meningitis was discussed at the International Congress of Medicine held in London in 1913, when it was decided that otologists all over the world should devote themselves to this subject and should present the result of their researches at an Otological Congress to be held in Munich in 1916. The check to this work is another of the regrettable arrests in the progress of medical science due to the war.

A subject of widespread interest is the treatment of school children suffering from acute middle ear suppuration. There is no doubt that the disease should be made notifiable and that parents and guardians should be compelled to place their children in hospitals at the onset of the attack for appropriate treatment during the acute stage by competent officers. The complications, which now come before us with alarming frequency, due to neglect and faulty home treatment, would then be very materially diminished. Since these complications may end in permanent disablement or even death, the question is one of individual and national importance. I am strongly of the opinion that adequate provision should be made at general hospitals particularly for these cases, also for the retention for several days of patients who have been subjected to the removal of tonsils and post-nasal growths, in order to reduce the possibility of sepsis from any outside infection, such sepsis being one of the common causes of acute middle ear trouble.

Rhinology.

In rhinology one of the most important operations emanating from the continent is that of sub-mucous resection for the correction of septal deformities, for which we are indebted to Killian, of Freiburg, in 1904, though also to Freer, of Chicago, in the same year. This operation has altogether superseded the older crushing, sawing, spokeshave and splinting operations, which were as unsurgical as they were painful and unsatisfactory in their results.

The resection operation has undoubtedly come to stay and we can claim for it 95% of utility. It is the ideal procedure, not only for the correction of septal deformities and restoration of the normal airways, but for the relief of certain pressure or reflex symptoms. Adult patients with a high deflection of the septum exerting pressure on the upper regions of the nose, not as a rule complaining of blockage of the air-ways or symptoms of nasal obstruction, but of headache or frontal discomfort and an inability to concentrate (a condition to which Guye, of Amsterdam, gave the name of aprosexia), are decidedly relieved of their troubles when the deflection is corrected by a sub-mucous resection. It is the only operation which is serviceable in these cases and is extraordinarily beneficial.

The resection operation is, however, contra-indicated in old age, in certain constitutional diseases, such as tuberculosis, syphilis, diabetes and Bright's disease, and in children under fourteen years of age while the nose is still undergoing development. The immediate results in children are, as a rule, entirely satisfactory, but after a few years may be often quite otherwise. It is within the experience of most of us to have seen young adults with stunted, broadened or depressed noses, who in the earlier period of life have been subjected to a too masterly surgical interference by an operator perhaps not sufficiently experienced in nasal surgery, or by one who had failed to view the necessary surgical requirements in the proper perspective.

It is also contra-indicated in persons whose vocation exposes them to nasal injury, such as boxers and footballers, on whom a more conservative operation, perhaps some modification of the older methods, should be employed.

Another important advance in rhinology has been in the treatment of inflammation of sinuses, due mainly to the more definite knowledge of the intimate anatomical connexions of the eye with the frontal, ethmoidal and sphenoidal sinuses, of the ocular and orbital complications which may arise, and of the many systemic disorders proved to be due to the absorption of toxins from infective foci within the sinuses, for which the ophthalmologist and internist are seeking the assistance of nasal surgeons with greater frequency.

With regard to the sinuses, the frontal is the one which still attracts most attention. The Killian operation, received with enthusiasm and universally adopted for a time and looked upon as the last word to replace the older methods, has, on account of its many fatalities, been practically discarded in favour of more conservative surgery. Rhinologists have now reverted to the intranasal operation originally introduced by Fletcher Ingals, or to one of the modifications of this method by Halle, Good, Mosher, Watson Williams and others. The technique which has been elaborated by Mosher, is the one adopted by many British surgeons for its simplicity and comparative safety; for the same reasons it is the method used for exenteration of the ethmoidal labyrinth and the opening up of the sphenoidal sinuses. It is generally admitted that few cases require more than intranasal treatment to put an end to symptoms of retention, but when an external operation is indicated, on account of either the failure of the intranasal method or the presence of orbital or intracranial complications, the Killian or Ogston-Luc or some modification of these will probably be found to be the procedure of preference.

The Lothrop operation, adopted by some American rhinologists in cases of small sinuses, is not advocated by Shambaugh and others, who assert that the ordinary intranasal methods are equally effective, less dangerous and preferable for cosmetic reasons, leaving no external disfigurement.

The work of Greenfield Sluder, "Headaches and Eye Disorders of Nasal Origin," is worthy of study by rhinologists, ophthalmologists and neurologists, whose co-operation is necessary in the diagnosis of many intractable headaches, neuralgias and eye disorders of obscure origin. Sluder's technique of exenteration of the ethmoidal labyrinth and opening up of the sphenoidal sinus is a formidable and dangerous procedure and difficult to accomplish. It will scarcely find favour with rhinologists in general, since good results can be attained by simpler methods.

Among the operations for the relief of chronic suppuration, those of Caldwell Luc and Denker are

almost universally employed; the Denker operation, however, is looked upon with disfavour by many rhinologists on account of the possible subsequent deformity and occasional damage to the nasal duct and to the nerve supply of the lateral incisors and bicuspids. Of the many intranasal methods perhaps the Canfield-Ballenger is the best for efficient drainage and for dealing with pathological conditions of the sinus.

The operation devised by West and Halle, of Berlin, to establish intranasal drainage for the cure of dacryo-cystitis will probably in future be handed over to the rhinologist, with his greater experience of intranasal surgery, to obviate the possible scarring and the epiphora caused by the external operation, as will also that for removal of pituitary tumours either by the endonasal methods of Hirsch and Cushing, or by a trans-septal route, or by a combination of this with a lateral rhinotomy, as advocated by Tilley and others.

Tonsils.

One of the triumphs of our speciality has been the introduction of new methods for the enucleation of diseased tonsils by dissection or by the reverse guillotine. The introduction, in 1909, of enucleation by dissection must be credited to George Waugh. He had noticed in his large clinics at Great Ormonde Street Hospital that many children suffering from tonsillitis or some systemic disorder, had previously undergone the partial removal of the tonsils by tonsillotomy and that complete removal by dissection was followed by beneficial results. This led him to elaborate his technique, to advocate its employment in all cases and to reject the older methods. It is easily performed in most adults under local anæsthesia, but in children over five years of age and in nervous adults the introduction of intratracheal ether anæsthesia has rendered the operation a comparatively easy procedure, especially for the control of hæmorrhage, which may be expected and is often encountered in adults with chronically enlarged and fibroid tonsils. It has been recorded, specially from America, that pulmonary abscess due to the entrance of blood or septic particles into the lung has followed after tonsillectomy under general anæsthesia by the old methods of administration. The danger of this complication, however, is considerably diminished by the pressure of ether vapour within the trachea when the newer method is employed. Almost immediately after Waugh introduced his technique of total enucleation by dissection, Whillis and Pybus, of Newcastle-on-Tyne, in 1910 brought forward their method of enucleation by the reverse guillotine. A paper describing it was sent by them to the *Lancet* for publication, but was held up for three months owing to want of space. In the meanwhile, a description by Sluder of the same method appeared in one of the American journals. The operation is therefore usually credited to him, though Whillis and Pybus were really first in the field. The reverse guillotine has completely revolutionized the older methods and in practised hands leaves nothing to be desired.

Focal Infections.

During the special period under consideration and also more recently much thought has been given to the relation between focal infection and systemic diseases. It is more than ever recognized that foci of infection in the nasal accessory sinuses, naso-pharynx, pharynx and buccal cavity may be responsible for such conditions as cardio-vascular, respiratory and kidney diseases, enlarged glands of the neck, acute and chronic rheumatism, arthritis, eye lesions, general neuritis and neuritis of the eighth nerve.

The tonsil has proved in many cases to be the offending organ; the definite cure or marked improvement which has followed removal in patients who have formerly resorted to other means of treatment without benefit, is often quite remarkable. Chronic foci of suppuration in tonsils, giving rise to symptoms of general infection, may exist without local signs and, though their presence is suggested by the history of repeated attacks of tonsillitis or by the presence enlarged glands at the angle of the jaw, they can only be detected by very careful examination. The size of the tonsil is of small importance, for we often find that apparently normal tonsils in patients giving no history of tonsillitis, will, on pressure, exudate pus and that small tonsils or remnants of tonsils left by incomplete removal, buried between faucial pillars, act as veritable culture beds, as do also the mushy or spongy tonsils, which are perhaps the most dangerous of all. The indications for tonsillectomy in obscure cases of systemic infection must be carefully studied, since the trouble may arise from other foci, such as the teeth or nasal accessory sinuses. In all cases pointing to infection where careful and methodical examination has failed to locate the source, I am strongly of the opinion that the tonsils should be removed, but only after co-operation with others in charge of the case. Children suffering from frequent attacks of colds in the head, headaches and systemic disorders should always undergo careful examination for any foci within the sinuses, since these may be present in addition to adenoids and septic tonsils.

Endoscopy.

Our speciality also is indebted to Killian, of Freiburg, with his assistants, von Eichen and Brunnings, for having made practical laryngoscopy, bronchoscopy, œsophagoscopy and gastroscopy, now referred to as per-oral endoscopy, or the direct method of examination of the lower air and food passages.

The original instruments of Killian or modifications and improvements by William Hill, of London, Chevalier Jackson and Mosher, of America, are now universally adopted and have superseded all other methods for the diagnosis and treatment of pathological conditions of and removal of foreign bodies from the lower air passages and œsophagus. They have already undoubtedly been the means of saving many thousands of lives which would formerly have been lost if left alone or subjected to surgical interference.

Bronchoscopy is also a valuable aid in the treatment of bronchiectasis, in some cases of pulmonary abscess and in the detection of a small foreign body which may, in some instances, be the cause of trouble. It has also proved of value in the treatment of bronchial asthma, making possible the direct application of remedies to the bronchial mucous membrane

whereby relief has been obtained and cures effected.

As an adjunct to endoscopy, Killian in 1911 brought forward his method of suspension laryngoscopy, which he personally demonstrated at the International Congress of Medicine held in London in 1913. This method has proved of immense value as an aid in difficult cases of cannulization, for the removal of foreign bodies impacted at the entrance of the œsophagus, for the inspection and treatment of pathological conditions of the larynx in children (more especially for the removal of papillomata) and in dealing with benign growths and tubercular lesions of the larynx in adults. The technique has been developed and new instruments added by Lynch, of America, where they are principally used by specialists.

Laryngology.

Turning to the larynx the treatment of the diseases of which has been materially simplified by the introduction of Killian's suspension method, we are indebted particularly to St. Clair Thomson for the knowledge we now possess of the use of the cautery in selected cases of tubercular lesions. Many brilliant cures have been effected both by himself and his confrères, Watson Williams, Dundas Grant, Tilley and others. It has practically replaced treatment by curettage and the application of lactic acid and other strong caustics.

As regards tuberculin, personally I have abandoned its use, but Watson Williams and Camac Wilkinson record good results, the latter advocating it strongly, especially for patients who cannot afford time or means for sanatorium treatment, always provided that there be no superadded local infection and that the administration be in the hands of competent experts.

In reference to intrinsic cancer of the larynx the technique of thyrotomy or laryngo-fissure, evolved by Semon, Butlin, Moure and Chevalier Jackson, has been developed and simplified principally by Irwin Moore. It is now regarded as a comparatively safe procedure and since, in practised hands, the results have been eminently satisfactory, giving over 80% of cures, it has been adopted by most operators. The further modification by Lambert Lack, which is one of partial laryngectomy, can also be strongly recommended, as it has given excellent results in several of my cases operated on during the last three years. The operation of total laryngectomy for extrinsic cancer, which is usually relegated to the general surgeon, will, probably, in the future become part of our speciality. The results of operation so far recorded are not at all encouraging, as patients, even if they survive the immediate effects of this mutilating operation, usually succumb within three years.

Diathermy.

The treatment of cancer of the tongue, mouth and pharynx has, according to Norman Paterson, been revolutionized by the introduction of diathermy. It was first employed in England in 1910 by Cumberbatch and later by Stuart Lowe and Harmer, and in Australia by Kent Hughes, of Melbourne. Paterson, during five years of personal experience and after a survey of a large number of cases, has come to the conclusion that in cancer of the bucco-pharyngeal cavity diathermy ought entirely to supersede the knife. He says the reason for its unpopularity is, to some extent, due to the facts that a costly and somewhat cumbersome apparatus is required to produce the special electric current necessary for its application, that the machine is complicated and apt to get out of order and that the operation itself is liable to be tedious. He states that the treatment by diathermy is of such recent development that it is too early to speak with any certainty of the results, but those in selected cases are extraordinarily good and if the patients could be seen early enough a large number of cures would probably be effected. It has been and still is too much the habit of the surgeon to regard this method as a palliative measure only and one to be reserved for inoperable cases. It is the best method, he says, to adopt in all cases and not only those on the border land. No incision of a cancerous growth in the mouth or pharynx, however small, should be carried out by the knife if diathermy be available. The result will depend largely on early diagnosis and expert advice should be obtained when there is any suspicion that malignant disease is present. Herbert Tilley endorses the above, but considers that in cases of sarcoma, radium should be the method of choice, as with it the rapidity and completeness of disappearance of the growth is often marvellous.

The other specialists to whom I have referred in connexion with the new work of diathermy, are equally enthusiastic, having had many encouraging results. Although this form of treatment is still in its infancy, one may, under present more favourable conditions for intercommunication and co-operation, expect to hear of its more extended employment in the immediate future.

It has been my endeavour in my address to present a brief survey of the most important work which has been accomplished by members of our speciality during this century. I think you will agree with me that, although its continuity has been interrupted by the war, there has been very definite progress and also a more general recognition of the importance of our particular branch of medical science by the public and the profession as a whole.

If we are satisfied with our own position with regard to clinics and facilities for surgical work, can we at this present time feel content with the position of our speciality in the medical curriculum of our universities? For while theoretical and practical instruction is available, attendance is optional and the majority of students on graduation go out into the world without even a rudimentary practical knowledge of the diseases of the ear, nose and throat and are unable to treat or even to diagnose the most simple ailments, which they will probably encounter from the very beginning of their professional career.

Therefore I think you will agree with me that the time has come when we, as a body of Australasian specialists, should exert our influence in our respective universities and teaching schools to legislate for the compulsory attendance of medical students

for practical instruction in oto-rhino-laryngology for a period of at least three months before graduation.

It has also been my intention in my address to emphasize the necessity of a spirit of co-operation which should exist between all branches of medicine and surgery, if there is to be any real advancement of knowledge for the benefit of humanity and for the steady development of medical science. If I have achieved my object, I shall feel that I have not unduly taxed your patience or occupied your time in vain.

A PRELIMINARY NOTE ON TWO INTESTINAL PARASITES IN PIGS.

By **F. W. O'Connor, M.R.C.S., D.T.M. & H. (Camb.),**
London School of Tropical Medicine.

Until six years ago the natives of Funafuti, Ellice Islands, usually deposited their fæces in the pig run, a compound about two hundred and seventy yards distant from the village, from which it is separated by a stone wall fence. Although the custom is no longer universal, it is still practised by individuals.

The fæces of seven pigs have been examined by me for the purpose of ascertaining if, under the circumstances, any relationship exists between the parasites of man and the pig in these islands. I had already discovered anchylostomum ova in the stools of 91% of the total population of the island. This disease had not previously been noted in the medical records of Funafuti or in papers published from the group.

I.—Anchylostoma.

In the fæces of five of the pigs I observed an ovum which appeared to me to be identical with that of the human anchylostome, both as regards measurements and general appearance. When passed, the eggs were in the fourth or eighth morula stage; development of the embryo within the shell was completed in from twelve to fourteen hours, when a rhabditiform larva was liberated. The latter grew considerably in size during the next four days, with modification of the œsophagus, as in the human species.

Mr. R. Allen, Island Manager of the Samoan Shipping and Trading Company, generously sacrificed one of his infected pigs, to enable me to investigate the adult worm within its host. I performed a *post mortem* examination immediately after the animal was slaughtered. Ten feet from the pyloric end of the stomach small yellowish white and reddish brown worms, showing a gentle curve, were found to be firmly attached to the mucosa of the jejunum. Some of the parasites contained blood and on removal a minute bleeding surface was exposed on the mucous membrane. Worms were very numerous in the adjoining two and a half feet of intestine, but then became scantier and were not found within two feet of the caecum or in any other part of the bowel. Thirty specimens, males and females, were collected for examination.

The larger females were a little more than 0.8 cm. in length, being thus smaller than the human parasite. The males were more slender and slightly shorter. The arrangement of the buccal capsule was similar to that of *A. duodenale*. The slender dorsal teeth were present at the edges of the dorsal gap in the chitinous capsule. The ventral teeth stood out clearly and were paired, the external ones being larger and more prominent. The œsophagus in both sexes, the genital and excretory openings, the spicules and arrangement of the bursal rays in the male showed no essential difference from the human parasite. Whether this parasite is the same as the human one or not I am not prepared to state until experiments now in progress are completed. But it is clear that not only does anchylostomiasis infect the pig in the Pacific, but that in some islands at least the anchylostome is a very common parasite of that animal.

II.—Iodamœba.

In specimens from four of the pigs (including the one examined after death) I found the cysts of an amœba which, on account of their similarity to the cysts of one of the human amœbæ, I recognize as belonging to the genus *Iodamœba*. The cysts show great variation in shape and size—7 $\mu \times 9 \mu$ to 10 $\mu \times 14 \mu$. The nucleus could not be seen in fresh specimens, but a darker, clearly defined area suggested the presence of a glycogen body. One or two refractile spots or rods, measuring from 1 μ to 2 μ in length, appeared to represent "chromatoids." On mounting specimens in Lugol's iodine, the presence of the glycogen body was confirmed and a peripherally placed nucleus was also found. In specimens stained with Haidenhein's hæmatoxylin and counter-stained with eosin, the structure of the nucleus showed the same characters as that of *I. bütschlii*, volutin granules became visible and the presence of small chromatoids became clear.

No amœbæ were found in the contents of the small intestine of the slaughtered pig, but free and encysted forms were found in the caecum and large intestine generally. It may therefore be claimed that its identity as *Iodamœba* or a parasite of the large intestine is established. The amœbæ, even though examined immediately after the animal's death, were very sluggish and much vacuolated. They soon became quiescent and rounded and, when stained, showed the same appearances of nucleus and protoplasm as *I. bütschlii*. This amœba belongs to the genus *Iodamœba* and I would suggest for it the specific name, *suis*: *Iodamœba suis*.

NEUROSES.[1]

By **D. M. McWhae, C.M.G., C.B.E., M.D., M.R.C.P.,**
Honorary Physician to Perth Hospital; Physician to No. 8 Australian General Hospital; Out-Patient Physician to Perth Children's Hospital.

I will first deal with the neuroses of war and then consider some of the civilian neuroses I have met with since my return to Australia six months ago.

The neuroses can be usefully classified as follows:

(1) Psychasthenia.
(2) Neurasthenia.
(3) Hysteria.

I.—Psychasthenia.

The Napoleonic type of mind, with its power of quick decision and determined action, is the exact

[1] Read at a Meeting of the Western Australian Branch of the British Medical Association on June 10, 1919.

opposite to the mind of the psychasthenic. Psychasthenics cannot grip reality. They cannot concentrate, their memory is bad and whenever they are called upon to make a definite decision or perform a definite action, they waste their time in useless hesitation. In order to understand the mode of causation of this condition, it is necessary to consider the three following psychological conceptions:—

(1) That the process of thought is very often not determined by rational argument, but by the directing force of complexes. Thus the happiness of a lover often tinges all his thoughts with optimism; the depression resulting from adversity or ill health may similarly affect all thoughts towards pessimism.

How few of us in fact are able to consider a subject in the cold light of reason and free from all bias or preconceived ideas!

These driving forces of our mental processes are called complexes, which have therefore been defined as "systems of ideas strongly coloured by an emotional tone which tend to influence the stream of thought."

In the neuroses it is not rational thought which is to be considered, but it is the way in which the thoughts of the neurotic are influenced by complexes.

(2) The next conception is the subdivision of consciousness into active consciousness, liminal consciousness and subliminal consciousness. Thus the thoughts connected with this paper are in my active consciousness; the fact that I am standing up and similar facts are in the margin of consciousness, *i.e.*, the liminal consciousness.

In the subliminal consciousness painful memories and thoughts are stored and they are kept there by a mental effort because their recall to consciousness causes distress.

(3) The third conception is that the cause of psychasthenia is an insoluble conflict between two complexes which conflict has been repressed into the subliminal consciousness.

The meaning of this is easily understood by considering the causation of the anxiety state in so-called cases of shell shock. A soldier in the trenches may be influenced in one way by the instinct of self-preservation, which is natural to all animals, and he may be influenced equally in another way by what Trotter has called the "herd instinct." By "herd instinct" is meant the ideas induced by the laws and customs of a community or herd; in this case it is the soldiers' ideas of duty, patriotism, *esprit de corps*, etc.. If the instinct of duty triumphs, the conflict is settled and the soldier carries on his work without the development of a neurosis. If the instinct of self-preservation triumps, the soldier may malinger, but he does not develope a neurosis. If the forces are so equal that neither is capable of influencing his conduct, he is unable to solve the conflict. He spends much useless energy in trying to solve it and then, as the conflict is painful to him, he refuses to think about it any more, *i.e.*, he represses it into the subliminal consciousness. Such a soldier, having used up all available nervous energy, may well became psychasthenic, *i.e.*, he becomes unable to regulate his ideas and actions in a logical way owing to difficulty in concentration.

The picture of a soldier suffering from psychasthenia (shell shock) is familiar to all. He is in the "anxiety state." He is tremulous, excitable, unable to concentrate and suffers from insomnia. He lacks decision and is very liable to emotional outbursts. Many still have battle dreams, *i.e.*, they wake up in terror after having gone through in a dream some distressing war experience. The symptoms of the anxiety state are those of anxiety and are due to the dominance of the complex of self-preservation in the repressed conflict and to this complex are attached the physical attributes of fear.

The original causation of this condition has been considered. Its persistence is largely due to the continuance of the repression of painful war experiences. The occurrence of this is shown by the fact that practically every psychasthenic soldier dislikes talking about the war or his own experiences of war and is acutely distressed if painful incidents are recalled to him.

The psychasthenic state continues because all the reserve nervous energy is used up in repressing painful war experiences.

At night, when such patients try to sleep, they relax their attention and the repressed memories tend to escape; in order to prevent these memories from coming into consciousness and causing distress, they flood their minds with many other thoughts and thus arises the difficulty in getting to sleep. Then later, if sleep comes, the repressing force weakens owing to the existence of the unconscious state and the repressed experience escapes as a battle dream and they wake up in terror.

The insomnia and battle dreams still further exhaust the patient's nervous system and thus a vicious circle is produced with continuance of the psychasthenia.

Obsessions.

Obsessions are the most important symptoms of psychasthenia. Bernard Hart defines obsession as an idea, action or fear intruding itself into consciousness in a manner which is felt by the patient to be irresistible. It does not fill the field of consciousness or dominate it indisputably. It is an incomplete and imperfect thing recognized by the patient as being in itself inadequate and unsubstantial.

Obsessions force themselves into consciousness without rational introduction in the same irresistible way as complex thought. The term obsession is often wrongly used. Thus a man is said to be obsessed by ambition, but this is a very real thing to him and therefore not an obsession. Or somebody is said to be obsessed by the memory of some past incident, but this mental preseveration is a very real thing and these thoughts are preoccupations, not obsessions.

Obsessions may be classified as follows:—

(*i.*) Obsessive ideas which may be either systematized or diffuse. Examples of systematized ideas are pseudo-hallucinations of vision or hearing in which the patient sees visions or hears imaginary voices, but is aware that the objects he believes he sees or hears, are false.

Ruminations are examples of diffuse ideas. Thus

a psychasthenic sets out to do something, but he has so completely lost confidence in himself that he may spend many hours in trying to make up his mind to do some simple action and when he has done it, he may spend similar hours in wondering whether he has done right. These doubts are really a great exaggeration of normal hesitation.

(*ii.*) Obsessive actions which also may be systematized or diffuse. Manias and pacts are examples of systematized obsessive actions.

A mania is an impulse to carry out a certain action, but, as the action is never completed satisfactorily, it is repeated over and over again. For example, I may cite mania of perfection in which many hours may be spent in trying to do perfectly some simple things, such as brushing the hair, etc..

A pact is the avoidance or performance of some particular action which is accompanied by a vague feeling of apprehension or alarm if the action is not avoided or performed.

Most of us have experienced pacts at some time or another. An example is the stepping over the cracks while walking along the pavement.

Tics are also obsessive actions, although they are often perpetuated by suggestion and thus become hysterical.

The diffuse form of diffuse obsessive action is the familiar emotional crisis, the so-called hysterical attacks which, however, are really attacks of psychasthenia and not of hysteria. They are emotional outbursts accompanied by useless motor activities.

(*iii.*) Obsessive fears. These also may be diffuse or systematized. The diffuse fear is *angoisse*, in which there is a vague unexplainable dread without any apparent cause. If the fear attaches itself to any specific object or situation, it becomes systematized, *e.g.*, agarophobia, claustrophobia, etc.. These phobias are crystallizations of *angoisse*. They are known to the patient to be without foundation and he cannot say why he is afraid.

The treatment of psychasthenia consists: (*i.*) In explaining to the patient in simple language the mode of causation and the nature of the conflict, together with the fact that the need for the conflict now no longer exists; (*ii.*) in ascertaining the nature of the painful war experiences which have been repressed; (*iii.*) in instructing the patient to face these painful experiences and not to try to forget about them. He should bring them out into the light of day and consider them in all their aspects. At first this causes great distress, but if the patient persists, the painful experiences in the end become familiar to him and cease to distress him. When at last they bore him, he is cured. The desire to repress them now no longer exists and the insomnia and battle dreams disappear. (*iv.*) Training the power of concentration and memory, *e.g.*, by précis writing.

The use of hypnosis will be considered separately.

II.—Neurasthenia.

It is well to restrict this to the comparatively narrow limits of a neurosis which is characterized by excessive fatiguability and which is due to exhaustion. This is the commonest form of neurosis met with in a civilian community. It is characterized by the presence of many different kinds of indefinite physical symptoms, well known to all of us.

As this is a condition of fatiguability due to exhaustion, the first and most important part of treatment consists in giving the patient mental and bodily rest, *e.g.*, by the Weir Mitchell treatment. The nutrition of spare and debilitated neurasthenics should be improved by overfeeding with milk. Continuous encouragement should be given by psycho-therapy, the patient being ultimately cured only when he has been made to believe that he is cured.

III.—Hysteria.

Much confusion exists in connexion with hysteria, owing to the absence of a satisfactory and generally accepted definition. Some writers have even classified as hysterical certain visceral and general disorders simply because their origin is obscure, *e.g.*, hysterical fever, hysterical anuria, etc..

Every hysterical symptom possesses the three following characteristics:—

(1) Suggestibility, *i.e.*, it is produced by either auto- or hetero-suggestions.
(2) It is capable of being exactly imitated by voluntary action.
(3) It can be removed by psycho-therapy.

Charcot's conception of hysteria was that certain permanent stigmata exist in hysterical patients which precede the development of obvious hysterical symptoms and which persist after these have been removed. The most constant of these stigmata are retraction of the field of vision, hemianæsthesia and pharyngeal anæsthesia.

These stigmata are never complained of primarily by the patient and they are only detected when they are specially looked for by the physician. Babinski first pointed out that stigmata are invariably the result of hetero-suggestion on the part of the examining physician and that they are exactly the same as all other hysterical symptoms, as they are produced by suggestion.

Colonel Hurst has confirmed this view in a series of experiments. Hysteria may, therefore, be defined as a condition of increased suggestibility in which symptoms are present which have resulted from suggestion and which are curable by psycho-therapy. This is very similar to Colonel Hurst's definition of hysteria.

Increased suggestibility in itself is not hysteria, because it may be present without the development of hysterical symptoms and because, if the suggestion is sufficiently powerful, there are probably few individuals who would not develope hysterical symptoms. Thus a soldier on recovering consciousness after being blown up, may be unable to walk owing to concussion of the spinal cord and a certain amount of functional paralysis may persist after the spinal cord has completely recovered. This conception of hysteria includes hysterical paralysis, contracture, tremor, fits, mutism, aphonia, deafness, blindness, etc. and thus is not narrow.

Such symptoms as tachycardia, vasomotor instability, profuse sweating etc., are not hysterical, because they cannot be produced by voluntary action. They may follow voluntary concentration of thoughts

which give rise to emotions and have been called "emotional neuroses."

The production of hysterical symptoms is best explained by examples such as the following:—

(1) *Auto-suggestion.* A soldier is gassed. The respiratory mucosa including the pharynx is burnt by the gas. For several weeks he is unable to phonate, owing to congestion and swelling of the vocal cords. Soon the cords completely recover, but as the soldier has previously made many unsuccessful efforts to speak, he has come to the conclusion that he is permanently unable to speak. The aphonia, which is now functional, has been produced by auto-suggestion.

(2) *Hetero-suggestion.* A bullet passes through the neck, injuring the vertebral column and contusing the spinal cord. Paraplegia results. A medical officer may diagnose severe injury to the spinal cord and may give a bad prognosis. The cord may rapidly recover, but the soldier remains paraplegic because permanent paralysis has been suggested to him.

Treatment.

In order to cure hysterical symptoms it is necessary that the physician should have absolute confidence in his ability to cure and that the patient should also believe that he will be cured.

Gross suggestion sometimes succeeds, but it may fail and the cure may become much more difficult. The best method, therefore, is one in which the explanation of the cause of the symptoms is followed by re-education of the part which has lost its function. This procedure is simple. The patient, for example, is taught to use a paralysed muscle or aphonic vocal cords, although he believes at first that he cannot do so. But firmness, persistence and kindness will in the end succeed in removing the hysterical symptom in the vast majority of cases.

It practically resolves itself into a battle of wills. An atmosphere of cure which results from the cure of previous patients, makes this battle much easier for the physician.

Generally with the disappearance of a hysterical symptom the patient's demeanour becomes quite normal, unless marked psychasthenic or neurasthenic states are associated with the hysteria.

The Use of Hypnosis.

Hypnosis is really gross suggestion and as I have already said, it is better not to use gross suggestion in the treatment of the neuroses. Still, in some cases it is very useful.

First, let me say that there is nothing mysterious about hypnotism. It is simply suggested sleep. The majority of people, if they are willing, can be hypnotized and practically anybody can learn how to do it. I use a round shining ball which the patient looks at fixedly. He thinks of some pleasant thought which he obtrudes between himself and what I am saying to him. All the time I suggest drowsiness and sleep. It is not necessary to have complete hypnosis in order to get results by suggestion, as suggestions in the half hypnotic state are often quite satisfactory.

It seems to me, however, that as the neuroses are characterized by over-suggestibility, it is unsound to try to improve them by using the same psychical defect. This is done, firstly, when the hypnotic state is suggested to the patient and, secondly, when suggestions are made to him while he is in this state.

Still, it is occasionally very useful.

Some weeks ago in this hospital I was asked to see a girl who was getting repeated attacks in which the respirations reached 120 per minute. After a quarter of an hour of this forced respiration, the pulse became feeble and the patient collapsed.

The attacks were being controlled by morphine and strychnine.

I only saw her once at about 11 a.m. and she was in the middle of an attack. I hypnotized her at once. The breathing became quiet and she slept peacefully. While in the hypnotic state I suggested to her that the present attack would be the last and that she would sleep till 1 p.m..

She awoke at one o'clock and the resident medical officer told me that, except for a very slight attack, they ceased completely from that time.

Early last month a patient consulted me for insomnia. He had taken a holiday for five months and had been on a trip to the East. The previous night at 3 a.m. he walked from Nedlands to Perth and back again, in order to induce sleep, but without success.

I treated him by hypnosis. That night he slept twelve hours. On the two succeeding days, he was again hypnotized. He rang me up several days later to say that he was sleeping splendidly. Since then I have not seen him, but presumably he is doing well or he would have again consulted me.

At the Base Hospital in the past week I have had one of the worst cases of psychasthenia I have seen. One of his symptoms I am treating by hypnosis and it is already much better. Whenever he tried to go to sleep, a terrible sinking feeling came over him; he tightened up and trembled violently all over. This was so severe that he was afraid to try to sleep. On four occasions I have hypnotized him while the "sinking feeling" was affecting him and on these occasions this feeling ended in sleep and not in rigidity, coarse tremor and fear. Now he can get to sleep without difficulty. In addition to his psychasthenic symptoms, he stammers very bady. This is being treated by re-education.

I have also under treatment at the present time a lady with psychasthenia and tic. I have twice controlled the tic in the semi-hypnotic state in order to demonstrate to her the functional nature of this symptom. I may say that the spinal accessory nerve had been severed.

I do not intend to persist with hypnotism in this case, as I believe that the condition is curable by other means.

Sufficient has been said to show that hypnosis is occasionally very useful, although I believe it should not often be used.

Civilian Neuroses.

What has been said regarding the causation of war neuroses applies to the neuroses of civil life. I must deal very briefly with the special aspects of these latter cases.

Neurasthenia is far commoner than psychasthenia

in civil life. In this country it is very prevalent among tired and worn-out women, especially in those who have had to manage large families without domestic help.

Civilian psychasthenia differs from war psychasthenia in that the nature of the repressed conflicts may be very variable and they are often difficult to detect, whereas in war the conflict is always between the herd instinct and the instinct of self-preservation. In the cases I have had, it has always been possible to determine by introspection and simple questioning the repressed worry that has caused the psychasthenia, although in this connexion I have found dreams to be a considerable help. Making due allowance for symbolization and dramatization, the character of dreams may indicate the nature of the repressed conflict. Free association and word association are used for the same purpose. In the former the patient talks freely without conscious effort of any kind. In the latter a series of words is read out to the patient. He replies to each by saying the first word that "comes into his head" and the reaction time is noted by a stop watch. The words in which the reaction time is delayed, give much information as to the nature of the repressed complex.

Cases of psychasthenia are not uncommon. In the past fortnight three patients have been sent to me.

The first was a typical case of the anxiety neurosis (*c.f.* shell shock). A man of 27 was burnt in January in a brewery vat and was nearly killed. He is tremulous, nervous and sweats freely. He awakens at night in terror, dreaming of fire in which he is being burnt. His powers of concentration and decision are defective and he cannot think of his accident without great distress.

The second was a girl, aged 22, who broke down three years ago after prolonged and strenuous office work. She is suffering from severe insomnia. When she tries to go to sleep, her mind is filled with thoughts and she has an apprehension of vague disaster (*angoisse*). When she sleeps, she dreams that she is making "mistakes at the cash desk and that the money has gone wrong." Her memory is very bad. She cannot concentrate or work and she has so completely lost confidence in her own judgement that she finds the greatest difficulty in making a decision of any kind whatsoever.

Inquiry showed that during the last year in which she worked, she had continuous *angoisse*, sleeplessness and a fear that she would break down. Nevertheless, she forced herself to carry on, as she was helping to keep the home where she was the eldest of a large family. There the conflict was between her own personality with its knowledge of her unfitness to carry on (*c.f.* self-abasement instinct) and the herd instinct.

This conflict was repressed and has been troubling her in dreams ever since. Everybody she has met since that time, has increased the conflict by telling her to "buck up" and forget about it. She has some vague pains and disturbance of micturition. It is interesting to note that three years ago, some bones were removed from her nose; 18 months ago she was curetted and hæmorrhoids were removed; seven months ago her appendix was removed.

The third was a case of psychasthenia with a tic which I have already referred to.

As regards hysterical symptoms of civil life, they appear to be quite as easy to cure as those due to war.

One of the first cases I saw when I returned to Australia was a girl, aged 23, who had been completely paralysed in both legs for 13 weeks. The legs were very spastic, the knee jerks and ankle jerks were very active and there appeared to be ankle clonus. A diagnosis of disseminated sclerosis had been made and the girl believed that she was paralysed for life. The doctor attending her, however, had some doubt as to the organic nature of the disease and asked me to see her. Examination showed that the case was entirely functional. The following Monday was her birthday and I made use of gross suggestion by telling her that on that day she would walk again. After three quarters of an hour of manipulation and re-education she was cured.

Another early case was that of a woman, aged 32. I saw her on February 3, 1920. She had gone to bed in August, 1919, after influenza. Her appetite had failed for five months and for the last six weeks she had only taken broth, peptonoids and jelly and she believed that she could not digest more than this. She was terribly emaciated and literally dying of starvation. On examination nothing abnormal was detected, except that the left pulse was smaller than the right, the cause of which has not yet been satisfactorily explained. A diagnosis of *anorexia nervosa* was made. She was made to believe that the stomach could now digest food. She was sent to the Perth Hospital, where I gradually increased her diet to 1.7 litres of milk a day. She was isolated and massaged. Two months later she was well enough to go home, having put on a great deal of weight and looking fat and well. Her doctor tells me that she has now gone back to work.

At the present moment in this hospital there is a lady who was admitted about a fortnight ago unable to walk or raise her arms above her shoulder. She had been partially paralysed for four months and for the past two months had been confined to bed, as she was unable to stand or walk. No signs of organic disease were detected and she could move her legs in all directions while lying down. The case was one of *astasia abasia* and with explanation and re-education, she has soon learned to walk. She has also regained power in her arms.

About six weeks ago a girl of 16 who had been aphonic for six weeks, was sent to me. I treated her by psycho-therapy on three occasions and she was then able to speak fairly well.

I have not time to refer to the cases of aphonia, stammering, tremor, paralysis, contracture, etc., which are common among soldiers. There is a soldier at the Base Hospital who has barked like a dog and stammered for three years whenever he attempted to talk. After one week's treatment, he is speaking very well, although when he gets excited he relapses slightly.

There is also a paraplegic who has been completely paralysed since 1916. This patient has a typical dorsal plantar reflex and ankle clonus. As, however,

the paraplegia came on suddenly after an injection of morphine and as all the other nervous symptoms pointed to functional disease, a diagnosis of hysterical paralysis was made. This diagnosis has proved to be correct and the patient can now walk fairly well with sticks and is rapidly improving. The dorsal plantar response had probably resulted from information given in one of the many clinics held over this patient.

There is a patient with dioglossia (baby talk) due to head injury in whom re-education has caused great improvement in speech, but I cannot take up your time any longer. I would draw attention, however, to the fact that cases of neuroses are common, but that the greatest possible care should be taken to eliminate organic disease before a diagnosis of functional disease is made.

Reviews.

THE DIAGNOSIS OF NERVOUS DISEASES.

The first edition of Sir James Purves Stewart's book[1] on the diagnosis of nervous diseases was published in the year 1908 and was so freely sought after that other editions soon followed, and now we have before us the fifth edition, grown from the original 380 pages and 192 figures to 584 pages and 298 figures. To increase to a cumbersome size is the habit of the popular book; it is also a habit with the clinical author to open his book with chapters on anatomy and physiology, which the reader likewise habitually passes over. In this connexion we, of course, recognize to the full that a knowledge of anatomy and physiology is fundamental to the acquirement of a knowledge of clinical medicine. At the same time, we think certainly that the specialist and probably the general practitioner confronted by an anatomical or physiological problem bearing on a case will turn to his Cunningham or other text-book. Moreover, neurology, considered in all its branches, has become a subject so extended as to be beyond the practical ken of one individual, hence the clinician in his attempt to teach anatomy and physiology is liable to err, as is noticeable, although in minor ways, in these pages. In further regard to the increase in size of this book, we notice in the chapter on tumours considerable repetition of what has been told in previous chapters dealing with the localization of function. And, in the discussion of lumbar puncture and disorders of sleep, there is much digression from diagnosis to the consideration of treatment. And, lastly, the chapters on organic war lesions and war neuroses, the chief addition to the present volume, will probably not have a lasting value and will need curtailment.

In summing up the value of the book we would say it just fills a want which the ordinary text-book of nervous diseases fails to supply. The fact is well known to the practitioner that disease seldom appears according to text-book type; usually the subject exhibits signs and symptoms common to more than one disease and it is only by careful analysis that correct diagnosis is reached. It is just this analysis which Sir James's book simplifies. For example, supposing we meet this confusing combination, ataxia of the limbs and myosis on one side, with hemiplegia and anæsthesia on the other; reference to the book may enable us to determine the character of the ataxia, that it is cerebellar, of the anæsthesia, that it is dissociated, and of the paralysis, that it is upper neurone, thus giving us a clue to localization from which we may infer that the remaining sign, myosis, is due to interference with the oculo-pupillary centre in the bulb, and so we may be led to the exact and correct diagnosis of thrombosis of the posterior inferior cerebellar artery. We would select as model chapters those on sensation and paralysis, and add that Sir James has the gift of putting facts on paper in a way which makes reading easy. Throughout the book there is evidence of the inclusion of recent research; for example, the work of Ramsay Hunt on lesions of the basal ganglia, of Walshe on paralysis, of Head on sensation and of Babinski on hysteria are all dealt with. But here we may say that Sir James optimistically inclines to take hypothesis for fact, thus the views of Bárány on the localization of function in the cerebellum and of Ramsay Hunt regarding the function of the basal nuclei and of Head on the cortical localization of sensation are by no means established. We also notice some omissions; the arm "rebound phenomenon" of Holmes and Grainger Stewart and the crawling test in disease of the cerebellum, the onset of sexual precocity from other causes besides affection of the pineal gland and the absence of headache in tumours of the brain in young children are not mentioned. We also think the resulting anæsthesia from cortical lesions as described by Head might be more accurately stated. And in the index, such an important part of a book of this description, when there are several references to a subject, it would be an improvement to show the principal one in bold type. But these are minor negative faults which detract little from the positive excellence of the work and though the use of inferior paper, enforced by commercial shortage, takes sharpness from some of the illustrations as compared with former editions, the book fully maintains its usefulness; indeed, is the only one in its class.

[1] The Diagnosis of Nervous Diseases, by Sir James Purves Stewart, M.D., F.R.C.P., Fifth Edition, Revised and Enlarged; 1920. London: Edward Arnold; Royal 8vo., pp. 584, with 298 illustrations. Price, 30s. net.

THE JOURNAL OF NEUROLOGY AND PSYCHOPATHOLOGY.

We are in receipt of the first number of *The Journal of Neurology and Psychopathology*, which we notice will be under the direction of the following editorial committee: S. A. Kinnier Wilson, T. Graham Brown, R. M. Stewart, Bernard Hart, Henry Devine, Maurice Nicoll and Carey F. Coombs—names which speak for themselves. It will be published quarterly.

This number contains as original papers: "A Note on Suggestion," by W. McDougall; "The Treatment of Cerebro-Spinal Fever," by C. Worster Drought; "Thoughts About Thinking and Dreaming and the Freudian Explanation of Dreams," by F. Parkes Weber; "A Case of *Encephalitis Lethargica*," by George A. Watson; short notes and clinical cases by R. M. Stewart, Douglas Firth and T. Graham Brown; a critical review on Vagotonia, by Alfred Carver; two editorials and a series of abstracts of current papers, classed under suitable headings.

There is no question that to all interested in neurology and psychopathology, whether engaged in practice or research, a journal in English, similar to the reviews on these subjects published on the continent, is a necessity. The new review compares favourably with any foreign review we have read; in general make-up it has some resemblance to the now defunct "Review of Neurology and Psychiatry," founded by the late Dr. Alexander Bruce, and it will fill the place of this periodical.

A question was asked in the House of Representatives by Mr. C. W. C. Marr, D.S.O., M.C., on September 14, 1920, of the Prime Minister concerning the intention of the Government in regard to the deportation of Max Herz. In his reply the Right Honourable W. M. Hughes stated that a representative deputation of medical men had assured him that "a number of Australian surgeons possessing superior skill were available to treat all the cases treated by Dr. Herz. The matter is now being considered by the Government."

Copies of the issue of *The Medical Journal of Australia* of September 18, 1920 (Congress Number), are available at the office of the *Journal*, at the office of the New Zealand Branch of the British Medical Association, Wellington, and at the establishments of Mr. George Barker, 225 Albert Street, Brisbane, of Messrs. Angus & Robertson, Castlereagh Street, Sydney, and of the New South Wales Bookstall Company, Limited, Sydney. The copies can be purchased at one shilling.

The Medical Journal of Australia.

SATURDAY, OCTOBER 2, 1920.

Presentation to Doctor J. A. Macdonald.

In the issue of the *British Medical Journal* of July 24, 1920, the President of the British Medical Association, the Chairman of Representative Meetings, the Treasurer and the past chairmen of Representative Meetings address an appeal to all members of the British Medical Association. It will be noted that the appeal has not been sent individually to members resident overseas. The honorary secretaries of the overseas Divisions and Branches have been asked to act as intermediators between the signatories and the members of their respective Divisions and Branches. The Council of each Branch in Australia will adopt appropriate means to interest the members in the movement to make a presentation to Doctor J. A. Macdonald, Chairman of the Council, on the occasion of his retirement. It is unnecessary to reproduce the message in these columns; every member of the Association has received his copy of the *British Medical Journal*. We would, nevertheless, amplify the message for the information of those Australian members of our great Association whose knowledge of the affairs of the Association in Great Britain is necessarily somewhat restricted.

The Representative Meeting of 1906 was held in the Caxton Hall in London. Sir Victor Horsley, who had recently recovered from a serious illness, took the chair at the beginning of the meeting. He had already intimated at Leicester his intention to resign the office of Chairman of Representative Meetings, which he had held since the reconstitution of the Association. Dr. H. A. Latimer moved, as soon as Sir Victor had relinquished the chair in favour of the Chairman of Council, that Dr. J. A. Macdonald, of Taunton, be elected Chairman. Everyone present agreed with the mover that Sir Victor's successor would find the task exceptionally difficult, because of the masterly manner in which the first Chairman had conducted the meetings and because of his sound knowledge of procedure and his sternly just rulings. Mr. G. Jackson seconded the motion. Dr. Macdonald was well known to his colleagues and enjoyed a great popularity. The unanimous vote that followed was a spontaneous and genuine expression of confidence. Next to Sir Victor Horsley, the members preferred Dr. Macdonald to all other aspirants. The members soon learned that excellent as had been the leadership of Sir Victor Horsley, that of Dr. J. A. Macdonald was not less so. His rulings were perhaps not always as sound as those of his predecessor, but his knowledge of men was even greater and he had an irresistible way of commanding the obedience, attention and even affection of all the delegates, including those whom he had to call to order. During the years 1906, 1907, 1908 and 1909 his popularity grew apace. In the smaller circles of the committees his delightful companionship was appreciated and his services to the Association were judged at their proper value. In the wider sphere of the Representative Meetings his influence was compelling and salutary.

It was the intention of Dr. Macdonald to occupy the chair of the Representative body for three sessions. After London came Exeter and after Exeter came Sheffield. His colleagues approached him to hold the office for a fourth year, largely because his partly Irish descent rendered him peculiarly suited to conduct a meeting in Belfast. The temptation was great and he consented. Late in the afternoon of July 27, 1909, after the business of the Representative Meeting had been completed, Sir Victor Horsley claimed the attention of the members for a brief period. Never before at a meeting of Association had the speaker displayed his oratorical art to such advantage. Sir Victor made a great speech in praising Macdonald and in eulogizing his geniality, his power of leadership, his sterling qualities, his influence for good. He referred to this Scoto-Irishman and ascribed his eminent success as chairman of the governing body of the British Medical Association to this dual ancestry. Dr. Macdonald was cheered to the echo when, with tremulous voice and an unwonted hesitancy of speech, he rose to reply to his friend, the unbending Victor Horsley. Dr. J. A. Macdonald has on many occasions witnessed the enthusiasm of his colleagues in passing votes of thanks to him. On no occasion has his triumph been greater;

on no occasion has he been so overwhelmed by the utterances of the biggest men in the medical world of Great Britain.

From the leadership of the Representative Meeting he passed to the leadership of the Council, then known as the Central Council. His term of office has been long; it has been distinguished. During these years the British Medical Association has passed through strange vicissitudes. Its position to-day affords the best evidence of the wisdom of the guidance of the chief officer of the executive. It is scarcely necessary to recall to our readers the favourable impression he made on Australasians on the occasion of his visit in 1914. It required but a brief opportunity for the members on this side to recognize the power of his personality and the depth of his wisdom in medico-political matters. So powerful a force in the medical profession is not often found. And for fourteen years and more, he had given his best services, at great personal sacrifice, to the British Medical Association, the society he loves. We would ask for a generous and wide response to the appeal which now comes to us from the old country.

TUBERCULAR MENINGITIS.

It has usually been accepted that tubercular infections of the meninges almost always terminate fatally. Drs. A. W. Hollis and I. H. Pardee have, however, recently recorded recoveries following the intradural injection of antimeningococcal serum.[1]

A series of eight cases treated by this method is reported. Five of the patients of this series recovered. Definite evidence of infection by the tubercle bacillus was obtained during life in three instances by demonstration of the bacilli in the cerebro-spinal fluid and by positive inoculation experiments in guinea pigs. In reviewing instances of recovery from this disease, as recorded in the literature, the authors make reference to a critical survey published by Martin, who in the year 1909, was able to find records of only 25 cases in which the disease was definitely proved to have been tubercular meningitis. From that time until the present day records in the medical publications of cases which have been definitely proven tubercular are stated to number eleven only. The actual discovery of tubercle bacilli in the cerebro-spinal fluid removed from the patient by lumbar puncture and the demonstration of the production of tuberculosis in an inoculated guinea-pig are regarded as the only real proofs of tubercular infection.

Many observers have reported temporary improvement following withdrawal of cerebro-spinal fluid from patients suffering from this disease. It has been suggested that beneficial effects may follow this procedure in several ways. It is obvious that the relief of intracranial tension so produced may bring about temporary relief of symptoms. Moreover, a certain amount of bacterial protein is removed. Leucocytic diapedesis is stimulated; this effect is probably augmented by the introduction within the dura of a foreign protein in the form of horse serum. The hypothesis is advanced that an irritative effect is produced by the serum on the meninges, inducing a cellular response and active hyperæmia about the site of any localized tubercular focus, with beneficial result.

[1] *Archives of Internal Medicine*, July, 1920.

PUERPERAL SEPTICÆMIA.

The sociologist has for a considerable time directed his attention to the disastrous wastage of life and of health resulting from child-birth. We are apt to congratulate ourselves on account of the magnificent inspiration and ingenious work of a few of the world's geniuses and to sit with folded hands because we vainly imagine that advance in knowledge accrues from discoveries without any effort on our part to apply this knowledge. Lister and Semmelweis showed us many years ago that puerperal septicæmia was a preventible affection and that when a woman dies of a febrile condition after the birth of a baby, the myth of having caught cold must give place to the recognition of an infection for which those in attendance are responsible. Notwithstanding this fact, women are allowed to die to-day of this avoidable disease. The medical profession has just had an opportunity of reading the thoughtful and timely presidential address of Dr. Fourness Barrington to the Section of Gynæcology and Obstetrics of the Australasian Medical Congress at Brisbane. The indictment is a severe one, but not too severe. Medical practitioners and midwives who attend women during confinement, are responsible for the lives of their patients. A life lost is inexcusable and in every case the exact cause should be examined, so that the accident may be avoided in all future attendances. If the death be found to be the result of carelessness, the obstetrician or midwife should be held responsible.

Dr. D. Berry Hart has recently restated the position he has adopted toward the problem of the mortality of puerperal septicæmia by considering two defects in the technique of the obstetrician.[1] In the first place he discusses the mechanism of labour, with the view to correcting what he regards to be a false doctrine of paramount importance. From careful study of clinical appearances, frozen sections and pathological findings, he claims that the fœtus elongates during labour. The fundus remains at a level 24 cm. above the *symphysis pubis*, while the head is descending. Whether the *liquor amnii* comes to occupy a space between the fundus and the breech is of small importance. Certain it is that the head becomes deflexed, that the arms lie under the chin and that one or both legs are extended. He pictures the canalization of the lower uterine section com-

[1] *Edinburgh Medical Journal*, April, 1920,

pleted at the end of pregnancy. As the head enters more deeply into the pelvic floor, its deflexion increases. The wheeling movement, as described by Matthews Duncan, represents but one part of a highly complicated evolution. There are two movements in the mechanism which Dr. Hart regards as disadvantageous. The first is the rotation of the posterior shoulder when the head has emerged. The second is the final passage of the head. He teaches that unless careful handling be adopted, dangerous perineal lacerations may occur which increase the risks of sepsis. He describes in some detail the correct method of guarding the perineum, so as to protect the stretched muscular, connective and cutaneous tissues against undue uterine action. He points out that gentle pressure in the brim axis does not lead to flexion of the head, because this is prevented by the position of the arms. On the other hand, the head should not be pushed forward, lest the vascular tissue below the subpubic ligament be injured. If, in spite of careful guarding of the perineum, a tear should occur, it must be properly sutured without loss of time.

The second doctrine put forward has reference to the third stage. Dr. Berry Hart states with great emphasis that the separation of the placenta does not take place as a result of the contraction of the placental site. He describes the separation in the following terms. Membranes in the lower uterine segment separate because the lower uterine segment expands and is not followed up by the membranes. The prævial portion of the placenta separates in this way. The only time in the third stage of labour when the placenta separates is not during a pain, but immediately after the pain is over. He gives argument and fact in support of this view that the site expands, while the placenta itself is unaffected. The result is a tearing through of the spongy layer of the *parietalis*. The lesson he deduces from this doctrine is that under no circumstances may Credé's method of expression be used. He pleads earnestly for patience and watchfulness. Impatience and compression are rewarded by the retention of particles of placental tissue and of large pieces of membranes. Both are eminently suited for the growth of pathogenic bacteria. Incidentally, he urges that the membranes and the after-birth should be examined carefully to ascertain whether any parts are missing.

THE PIG AS AN INTERMEDIATE HOST OF HUMAN INTESTINAL PARASITES.

In the current issue we publish an important communication transmitted to us by Dr. F. W. O'Connor, the Commissioner of the London School of Tropical Medicine in the Ellice Islands. In the course of his investigations into the parasitical infections of the inhabitants of Funafuti, Dr. O'Connor has found that 91% of the population are infected with hookworm. With the thoroughness characteristic of the born investigator, he immediately took stock of the habits of the natives with a view to ascertain whether any epidemiological factor existed locally other than those which are usually associated with this infection. The fact that a few natives still defæcate in the pig run and that this habit was formerly general, induced him to examine the fæces of the pigs. The search led to the discovery of the eggs and adults of *Anchylostomum duodenale* or of a parasite indistinguishable by ordinary means from this worm. Within a short time we may expect definite information concerning the identification of the pig hookworm. It needs but little imagination to realize that this discovery is of considerable importance not only in connexion with the spread of the infection in the Pacific Islands, but also in connexion with its spread elsewhere. It appears that the hookworm finds a congenial environment in the intestines of the pig. If it is a common parasite of the pig in the Pacific Islands, it may be an occasional parasite of pigs of the country districts of Australia where hookworm is known to exist. The team of scientists working under the direction of Dr. W. A. Sawyer in Queensland is busily engaged in teaching the people the immense importance of the proper use of well-constructed latrines. Hitherto the sanitary arrangements in many of the northern districts have been faulty in the extreme and as a corollary, the people have not developed a sanitary conscience. It must be admitted that pigs and possibly other quasi-domesticated or wholly domesticated animals have had an opportunity of becoming infected.

Dr. O'Connor's second discovery is scarcely less important than the first. That he found a large intestine amœbic parasite of pigs similar or analogous to *Iodamœba bütschlii* of man, indicates another source of danger of infestation of human beings. The fact that pigs existing in close proximity to man can acquire at least two of man's intestinal parasites is highly significant. The pig has been incriminated within recent years of being an intermediary host of the parasite of poliomyelitis. The suspicion has probably been based on insufficient evidence and for the present the pig has been acquitted with the verdict of "not proven." Dr. O'Connor's indictment is of a different character and the pig stands convicted of two offences. There may be other charges to follow.

THE SOCIETY OF RETURNED MEDICAL OFFICERS OF NEW SOUTH WALES.

The Annual Dinner and General Meeting of the Society of Returned Medical Officers of New South Wales will be held on Thursday, October 7, 1920, at 7 p.m., at the Burlington Café, George Street, Sydney.

The Honorary Secretaries will be glad if members of the Society and all other returned medical officers who intend to be present, will apply without delay for tickets (20s. each inclusive) so as to facilitate arrangements for the catering.

***Directory.*—It has been decided to compile and issue to members a directory of all medical officers who have been on service and are now practising or resident in New South Wales. The Honorary Secretaries wish any medical officers who have not yet done so, to send in their addresses at an early date, stating their rank, last unit, etc..**

***Subscriptions*—Subscriptions are now due. Intending members are reminded that in addition to the annual subscription (5s.) there is an entrance fee of 5s..**

CHARLES E. WASSELL, Hunter's Hill.
HUGH R. G. POATE, 225 Macquarie Street, Sydney.
} Joint Honorary Secretaries.

Abstracts from Current Medical Literature.

PATHOLOGY.

(107) Rocky Mountain Spotted Fever.

In the *Journal of Medical Research* (November, 1919) the studies of S. Burt Wolbach on Rocky Mountain spotted fever are recorded in 200 pages of detailed information. The work is supplemented by 70 illustrations bearing on the subject. In the early chapters are to be found a historical review and descriptions of the geographical distribution and clinical manifestations of the disease. The author defines it as an acute specific infectious endangeitis, chiefly of the peripheral blood vessels, transmitted by a tick, *Dermacentor venustus*, and characterized by an onset with a rigor, continued fever, severe pains in bones and muscles, headache and a macular eruption becoming petechial. The rash appears first on the wrists, ankles and back, then over the whole surface of the body. The disease occurs almost wholly in the spring months, corresponding to the activity of the ticks. The incubation period is three to twelve days, usually four to eight days. Death in the severe cases usually takes place between the sixth and twelfth days of the disease. The blood shows a slight leucocytosis with increase of large mononuclear leucocytes, while the red cells decrease in number. Pneumonia is the one complication and it is not frequent. There is no specific treatment. The only constant distinctive gross pathological lesions are those of the skin and enlargement of the spleen, which may weigh two to four times the normal. The liver is large, pale and often fatty. Rickets was the first to demonstrate a minute, lanceolate, bipolar organism in the blood of man, guinea-pigs and monkeys. Similar organisms were found by him in the tissues of infected ticks and in the eggs of infected ticks. He showed that the larvæ of *Dermacentor venustus*, when fed upon infected guinea-pigs, remained infective in the nymph stage and that nymphs, when infected, remained infective after reaching the adult stage. He also showed that eggs from infected females would produce the disease when injected into guinea-pigs. Recovery from the disease confers complete and lasting immunity in animals. Passive immunity may be conferred by the injection of blood from an immune animal simultaneously or soon after the injection of the virus, but this immunity is not lasting. In sections the parasite invariably has the form of a minute paired organism often surrounded by a very narrow but definite clear zone or halo, as if encapsulated. It is often possible to show that the ends of the pairs are tapered, so that the appearance may be likened to that of a diminutive pair of pneumococci. This paired lanceolate form is found in the endothelial cells of the vascular lesions and most abundantly in smooth muscle cells of the *tunica media* of vessels with the lesions. The length of a pair is about 1 μ, the width between 0.2 and 0.3 μ. In smear preparations of mammalian tissues slender rod-shaped forms are found, some of which exhibit polar granules. They occur in pairs, the individuals of which may be almost a micron in length. In addition in these smears there are also very minute, pale blue staining, rounded forms. These rods and minute rounded forms resemble the first forms of the parasite which occur in smear preparations from the intestinal tracts of infected ticks. The virus is not filterable; it resists dessication for almost eleven hours; it is destroyed by heat, the destructive temperature being between 45° C. and 49° C.; it will withstand freezing for a period longer than four and less than nine days. In male guinea-pigs inoculated with the virus the first visible sign of the disease is swelling and reddening of the skin of the scrotum, which may exhibit a definite line of demarcation about a necrotic portion. Reddening and swelling of the eyelids, ears and paws are not seen as a rule, unless the animal survives six or seven days of fever. *Post mortem* the most striking changes are found in the testes and adnexa. The testes are swollen and injected usually with minute hæmorrhages into the *tunica* at both poles. In female guinea-pigs the reaction to the disease is less striking. Unlike guinea-pigs, the susceptibility of the rabbit to the virus is subject to vagaries which have not yet been explained. The course of the disease in all four monkeys tested was rapid. All succumbed by the end of the seventh day. Swelling and redness of the scrotum was observed in the males on the fifth day. The extensive hæmorrhages into the scrotal tissues, often with necrosis and similar lesions of the testes and appendages, are the most characteristic gross findings both in animals and in man. The lesions of Rocky Mountain spotted fever in man and in laboratory animals are practically restricted to the peripheral blood vessels, including those of the external genitalia. The vascular lesion is in the beginning a proliferative lesion on the part of the vascular endothelium, often leading to thrombosis. A direct injury to cells by the parasite is shown by the degenerative changes found in the endothelial cells and in the smooth muscle cells of the *tunica media*, which are also invaded by the parasite.

(108) The Skin Lesion in Morbilli.

F. B. Mallory and E. M. Medlar state that the efflorescence of morbilli is due to a proliferative and exudative reaction in and around a small network of capillaries in the upper part of the corium (*Journ. of Med. Research*, March, 1920). The reaction consists of occasional mitoses in the living endothelial cells, of emigration of endothelial leucocytes and of an active proliferation of them around the blood vessels, of a very slight emigration of polymorpho-nuclear leucocytes and lymphocytes and of phagocytosis of them by the endothelial leucocytes. The exudation of serum and endothelial leucocytes at first is active and passes to the adjoining epidermis, hair sheaths and sebaceous glands. It often collects in small foci, forming minute vesicles and pustules. The epithelial cells involved in the exudation undergo necrosis. By the time the exanthem is clearly evident, these minute lesions in the epidermis are already beginning to dry up and later desquamate as scales. Koplik's spots correspond exactly to the minute early lesions of the epidermis, but instead of drying up, they tend to macerate and may terminate in erosions or, if secondarily infected, in ulcerations. No evidence of a primary necrosis and of an acute exudation of polymorpho-nuclear leucocytes, such as many of the common cocci produce, could be found. Instead, the reaction is almost entirely on the part of the endothelial cells and leucocytes, as in enteric fever and in certain other infective processes, but it is more acute than in any of them. The endothelial cells lining the capillaries in the lesions have swollen, finely granular cytoplasm. In the earliest lesions they often contain one to four, rarely more, minute intensely staining spherical bodies, which vary a little in size. The nature of these bodies cannot be determined. They may be parasites or retrograde changes within the cytoplasm. It is possible that they may be the causal agent, possibly a coccus in various stages of digestion. Their positive reaction to Gram's staining would favour this view.

(109) The Regeneration of Smooth Muscle Cells.

In the *Journal of Medical Research* (March, 1920) Frank B. Berry records the results of his investigations on the regeneration of smooth muscle cells. The consensus of opinion up to the present has been that, while there may be true regeneration of smooth muscle cells in cold-blooded animals, in the higher vertebrates and man this is of such insignificant amount as to be quite negligible. The author considers that this view is erroneous and submits evidence to show that following injury sufficient to cause necrosis, there is active regeneration of smooth muscle cells, both in man and in other warm-blooded animals. The scar itself, as in almost every kind of reaction to injury, consists of vascularized fibrous tissue, but closely abutting on both sides there is active proliferation of the muscle by mitotic division. As healing becomes complete, the scar contracts and thus approximates the newly formed muscle fibres on either side of the lesion. This active response on the part of the muscle to injury of various sorts is quite different from that following physiological stimuli, as in pregnancy. Here the existing individual muscle fibres hypertrophy to a great extent and it is thought that some new ones are formed by budding and amitosis. The author found no

suggestion of mitotic activity in sections of uteri from cases of early pregnancy or in hypertrophic stenosis of the stomach. It seems doubtful if Hirschsprung's disease can be ascribed entirely to simple hypertrophy. It would appear rather that there must be some hyperplasia, though in what manner is not clear.

PÆDIATRICS.

(110) Fordyce's Disease.

Fordyce's disease is a chronic affection of the mucous membrane of the mouth and lips, characterized by the presence of whitish or yellowish, scanty or abundant, discrete, aggravated and often coalescent milium-like bodies, occurring more especially on the inside of the mouth, laterally along the line of teeth as far back as the last molar, and possibly somewhat less frequently on the vermilion or mucous and inner surface of the lips. The lesions are from pin-point to pin-head in size and are usually of a pale buff or oatmeal colour. They are almost invariably imperceptible to touch, being situated on a level with the buccal mucosa, but at times they may send out hair-like projections, which penetrate the mucous membrane. As a rule, the patient is unconscious of the condition. The disease is most commonly encountered between the ages of 20 and 40, but it has also been observed in young children. J. C. Regan (*Amer. Journ. of Dis. of Children*, June, 1920) considers that among the conditions of the mouth which may simulate Koplick's spots, Fordyce's disease deserves a place greater in importance than that accorded aphthous stomatitis. Fordyce's spots are especially apt to be mistaken for Koplick's spots when they exist in patients who develope German measles. The similarity between the clinical symptoms of the two diseases is further increased by the presence of these pseudo-Koplick's spots. The resemblance between the two types of lesions may be rendered still closer in that in German measles the buccal mucosa assumes a deeper coloration than normal. As this is often more prominent at the site of Fordyce's spots, it gives them the appearance of an acute lesion. Fordyce's disease is frequently mistaken for early Koplick's spots in patients ill with various infective diseases and exposed to measles, whose buccal mucosa is being examined daily for the appearance of the true spots. Children sent into a hospital on account of a suspected laryngeal diphtheria or influenzal croup, may, at times, be isolated because the presence of these lesions necessitates the exclusion of morbilli in the diagnosis. The possibility of these pseudo-Koplick spots leading to errors in diagnosis when they are present in patients with suspicious-looking maculo-papular eruptions from serum or antitoxin, should be borne in mind. Well-marked and pronounced examples of Fordyce's disease are unusual in young children. Slightly marked cases are, however, frequently seen, even in infancy, but the lesions are so few in number, so small and often situated so far back on the buccal mucous membrane and of so nearly the normal colour of the mucosa of a child, as usually to be overlooked, except where a careful search is being made for Koplick's spots. The two types of lesions, Fordyce's spots and Koplick's spots, are, as a rule, so dissimilar that a differential diagnosis offers no difficulties to one familiar with their characteristics. Those unfamiliar with their appearances may, however, readily confuse them. As already stated, the colour, arrangement, distribution, evolution, size and location of the two lesions differ in so definite a way as to permit readily of their differentiation. The author states that the examination should be carried out in daylight and, if possible, in sunlight.

(111) The Feeding of Infants During the Second Year.

At the end of the first year the baby will be taking milk, whole or diluted, usually with some cereal added. According to the present fashion, orange juice will be given and perhaps broth and beef juice. J. L. Morse (*Journ. Amer. Med. Assoc.*, February 28, 1920) considers this a proper diet at this age without any addition. If cereals are not given at this time they should be added at once, at the beginning of two feeds daily with milk and salt, but without sugar or cream. The latter is unnecessary and the omission of sugar curbs the taste for sugary foods later on. Broth and beef juice should be given daily at the beginning of another feeding, for preference expressed beef juice in amounts not greater than 60 c.cm.. It may cause sleeplessness. A month or two later bread crumbs and rice may be added and, if sufficient opposing teeth be present, toast, stale bread or plain biscuit in the hand after one or more feedings, but not between meals. Orange juice may be given an hour before meals and prunes or baked apple at the end of a meal, especially if constipation be present. At about fifteen months macaroni, *blanc mange* and junket may form part of the mid-day meal. Potatoes should only be used sparingly after 18 months of age and must be baked. At this age, but not before, egg may be given—one half twice a week, increased to one thrice weekly. If these agree, eggs may be added to puddings. Eggs must be scrambled, soft boiled or poached. Milk should form the basis of the diet up to 1.1 litres daily. At the end of the second year meat may be added to the diet and some months later green vegetables, spinach, beans, peas, asparagus and celery. The author considers that the dietary thus outlined is quite sufficient for later infancy. Babies do well on this simple diet, which does not tax the digestive powers as a more liberal method of feeding would. Nature provides the infant with a dilute food, relatively high in fats and carbohydrates and relatively low in proteins, with the protein in an easily digestible form. The transition from this form of food to the adult dietary should be gradual and not abrupt. From various tables and analyses the author finds that the simple diet provides the caloric needs of babies in the second year and more than covers their protein needs. The various vitamines are present in abundance. Calcium and phosphorus are well provided and, if iron be not present in sufficient amount, it is better to give an iron mixture than to upset the digestion by giving green vegetables. As regards possible constipation, it is better to give apple pulp or orange or prune juice than the more bulky, more indigestible green vegetable food.

(112) The Luetin Test.

Because of the apparent difficulty in diagnosing many cases of congenital lues in the out-patient department, especially the latent type, A. E. Meyers (*Arch. of Pediatrics*, April, 1920) employed the luetin test on every child (168 cases) that gave the slightest suspicion of the disease, either from the history or from the physical examination. All the children were also subjected to the Wassermann test. The reactions were grouped under five heads: papular, vesiculo-pustular, delayed or torpid, urticarial and hæmorrhagic. The majority were of the papular type. After 48 hours there appeared at the site of injection a definitely indurated papule, measuring from 5 to 12 mm. in diameter, usually surrounded by a zone of redness, which varied in size. During the next three or four hours the papule had the colour of venous blood; this colour lasted for a number of days. Over one third were of the pustular type. An indurated papule appeared in two or three days. It soon became vesicular and later pustular. After rupture and discharge of the contents, a scab formed and separated, leaving a pigmented macule, which persisted for a number of weeks. In several cases there was a delayed or torpid reaction. Here the primary papule disappeared rapidly, simulating a negative reaction, only to reappear in 10 to 12 days and to progress to either the papular or pustular type. In only three cases was the reaction of the urticarial type. About nine days after injection a distinct urticarial lesion, about 8 mm. in diameter, appeared. This changed in a few days to the papular form, with a moderated amount of induration. The hæmorrhagic type was observed twice. Instead of the lesion filling with pus, it contained a hæmorrhagic exudate. When the blood-stained fluid escaped, a scab formed. In addition, various general symptoms were noted and there was some variation in the conduct of the local lesion as regards desquamation, induration and colour. The author considers that the luetin test is more reliable in congenital lues than the Wassermann test. He found that at least 65% of children with congenital syphilis react to the test. He claims that the test causes no constitutional disturbances. It is more important to perform a routine luetin test than a von Pirquet, provided that the material can be obtained.

British Medical Association News.

MEDICO-POLITICAL.

A meeting of the Victorian Branch and of the Medical Society of Victoria was held at the Medical Society Hall, East Melbourne, on August 4, 1920, Mr. G. A. Syme, the President, in the chair.

The President moved:

That Dr. C. H. Mollison be elected a life member of the Medical Society of Victoria, for valuable services rendered to the Society.

He stated that all present would agree with this expression of their appreciation of Dr. Mollison's long and valuable services as Honorary Treasurer to the Branch and to the Medical Society of Victoria. His services in this capacity extended over a period of 25 years, at first, as Treasurer of the Medical Society of Victoria and, since the amalgamation, as Treasurer of the two bodies. His work at all times had been performed so modestly and so unostentatiously that very few members of the profession in Victoria had realized the onerous nature of his duties. His colleagues on the Council, however, had recognized the large amount of work involved in supervising the financial affairs of the two bodies. In recent years the establishment of various funds had increased the extent of his work and responsibility. He, the speaker, had felt that the members should convey to Dr. Mollison their very great appreciation of his work. He therefore took pleasure in proposing the motion.

Dr. J. F. Wilkinson esteemed it an honour and a privilege to second such a motion. The members of the Council had some knowledge of the great amount of work carried out by Dr. Mollison for the good of the medical profession. He could not say too much in praise of the manner in which Dr. Mollison had kept the accounts and performed his other duties during his long term of office. Dr. Wilkinson thought that it would not be out of place to pay a tribute to Dr. Mollison's work in another capacity. Those who had been associated with the Melbourne Hospital, would remember Dr. Mollison in the Pathological Department. He had worked there, year after year, without fee or reward, until the recent expansion and re-organization of the clinico-pathological work had entirely revolutionized the Department. The sterling work of Dr. Mollison at the Melbourne Hospital had filtered through the successive generations of students to the whole profession. He, the speaker, was glad that the members of the Society were grasping an opportunity of expressing their appreciation of Dr. Mollison's work and their esteem and affection.

The President put the motion to the meeting. It was carried by acclamation.

Dr. C. H. Mollison said that he was unable to express his feelings caused by the kindly action of the President. He realized that his colleagues, in making him a life member of the Medical Society of Victoria, were conferring a great honour upon him. He thanked the President and Dr. Wilkinson very sincerely for their kind words and the members for the manner in which they had received the motion.

Dr. A. V. M. Anderson moved:

That the resolutions concerning the duties of a medical practitioner in relation to cases of criminal abortion adopted by the Royal College of Physicians, London, on January 27, 1916, be approved by this Branch.

Dr. Anderson explained that the necessity for a definition of the attitude of the medical profession in relation to cases of criminal abortion had arisen from a letter sent by the late Chief Commissioner of Police, Sir George Steward, to the members of the staff of the various metropolitan hospitals. The Chief Commissioner had intimated his intention of prosecuting a vigorous campaign in connexion with this criminal practice, which he stated was of wide prevalence. He sought the assistance of the members of the staffs of hospitals and invited them to notify the police whenever the medical officers of the institutions had reason to suspect that criminal abortion had been attempted. Dr. Anderson stated that the matter had been considered by the Council and that Mr. Syme, Dr. Ramsay Webb and he had been deputed to wait upon the Chief Commissioner of Police. They had assured the Chief Commissioner that the profession was anxious to help in any measures directed against criminal abortion. They had, however, to restrict their actions on account of the obligation of professional secrecy.

The Council had considered that the Australasian Medical Congress might lay down some guiding principles in connexion with this matter. A proposal had been forwarded to the Executive Committee. The Committee, however, had deemed it wiser to ask that the question should be dealt with by the various Branches. It was possible that a ruling might be given at a later date by the Federal Committee.

The Ethical Sub-Committee of the Council had considered the matter very carefully. They had recognized two points of view. On the one hand, medical practitioners should do all in their power to prevent crime. On the other hand, they should not violate a professional confidence. The memorandum of the Royal College of Physicians had been carefully drafted on the best advice obtainable. It seemed to the Ethical Sub-Committee and to the Council that the Branch could not do better than approve the resolutions of the Royal College of Physicians as expressing the views of the profession in Victoria on this important subject.

In conclusion, Dr. Anderson read the resolutions concerning the duties of medical practitioners in relation to cases of criminal abortion (*British Medical Journal*, February 5, 1916, page 207).

The College is of opinion—

(1) That a moral obligation rests upon every medical practitioner to respect the confidence of his patient; and that without her consent he is not justified in disclosing information obtained in the course of his professional attendance on her.

(2) That every medical practitioner who is convinced that criminal abortion has been practised on his patient, should urge her, especially when she is likely to die, to make a statement which may be taken as evidence against the person who has performed the operation, provided always that her chances of recovery are not thereby prejudiced.

(3) That in the event of her refusal to make such a statement, he is under no legal obligation (so the College is advised) to take further action, but he should continue to attend the patient to the best of his ability.

(4) That before taking any action which may lead to legal proceedings, a medical practitioner will be wise to obtain the best medical and legal advice available, both to insure that the patient's statement may have value as legal evidence and to safeguard his own interests, since in the present state of the law there is no certainty that he will be protected against subsequent litigation.

(5) That if the patient should die, he should refuse to give a certificate of the cause of death and should communicate with the coroner.

The motion was seconded by Dr. Allen Robertson. A discussion took place and the motion was carried without dissent.

At a meeting of the New South Wales Branch held at the B.M.A. Building, 30-34 Elizabeth Street, Sydney, on September 24, 1920, the President, Dr. C. B. Blackburn, O.B.E., announced that only two nominations of members for election as delegates of the Branch on the Federal Committee of the British Medical Association in Australia, had been received. He therefore declared that Dr. R. H. Todd and Dr. J. Adam Dick were elected members of the Federal Committee.

On the motion of Dr. George E. Rennie, an expression of sympathy was accorded to Dr. W. H. Crago, whose wife had recently died after a long illness.

The undermentioned have been nominated for election as members of the New South Wales Branch:—

Cecil Uren, Esq., M.B., 1915, Ch.M., 1919 (Univ. Sydney), 450 Miller Street, North Sydney.

Arthur Lacy Dawson, Esq., M.B., 1911 (Univ. Sydney), 183 Macquarie Street, Sydney.

THE STANDARD OF DENTAL PRACTICE.

The Council of the Victorian Branch of the British Medical Association has issued a protest to the State Premier in connexion with the provisions of a bill now before the Legislative Assembly to amend the *Dental Act*. It is proposed to register as dentists dental mechanics and others who are not required to pass through a full curriculum of study. The Council recognizes that the science of dentistry is closely associated with that of medicine and surgery. They claim that in the public interest the practice of surgery shall be limited to persons who have been scientifically trained, especially in pathology and bacteriology.

We would call attention to the fact that several years ago the question of the status of the dental profession and of its importance to the community was seriously considered by the Commission of the International Congress of Medicine. It was held that sooner or later dentistry would become a special branch of surgical practice. The principle was recognized that adequate and scientific treatment of the teeth and other structures within the mouth demanded as efficient a knowledge of anatomy and physiology and of pathology as the treatment of any other special organ. It was therefore resolved to institute a section of stomatology. Only those dentists possessing a medical qualification were permitted to take part in the proceedings. The proposal embodied in the Victorian Bill is a retrograde step which must be resisted most strenuously.

Naval and Military.

APPOINTMENTS.

The following announcements have appeared in the *Commonwealth of Australia Gazette*, No. 73, of September 9, 1920, and No. 75 of September 16, 1920:—

Permanent Naval Forces of the Commonwealth (Sea-Going Forces).

To be Surgeon Lieutenant-Commander—

Surgeon Lieutenant (Acting Surgeon Lieutenant-Commander) Carlton Atkinson Ellis, F.R.C.S., dated 4th August, 1920.

Citizen Naval Forces of the Commonwealth, Royal Australian Naval Brigade.

Transfer—

Surgeon-Commander Bedlington Howel Morris is transferred from the (M) Section to the (O) Section of the Royal Australian Naval Brigade. Dated 1st July, 1920. (In lieu of notice appearing in *Commonwealth Gazette*, No. 67, of 19th August, 1920, page 1108.)

Australian Imperial Force.

APPOINTMENTS TERMINATED.

First Military District.

Major M. G. Sutton, 24th September, 1920.

Second Military District.

Lieutenant-Colonel E. W. Fairfax, 14th April, 1919.
Major C. N. Smith, 2nd October, 1920.

Third Military District.

Major S. C. Fitzpatrick, M.C., 21st July, 1920.
Captain J. Wall, 15th July, 1920.

Australian Military Forces.

Second Military District.

Australian Army Medical Corps—

Captain S. W. Morton to be transferred to the Reserve of Officers, 16th August, 1920.

Third Military District.

Australian Army Medical Corps—

The resignation of Captain (Honorary Lieutenant-Colonel) E. T. Brennan, D.S.O., M.C., of his commission is accepted, 18th July, 1920.

Sixth Military District.

Australian Army Medical Corps Reserve—

Honorary Captain J. H. R. McCutcheon to be transferred to the Reserve of Officers, and to be Captain, 1st August, 1920.

University Intelligence.

CONFERENCE OF AUSTRALASIAN UNIVERSITIES.

A conference between representatives of the Faculties of Medicine of the Universities of Adelaide, Melbourne, Otago and Sydney was held in the Senate Room at the University of Sydney on August 31, 1920. The delegates who attended the conference were: Sir Joseph Verco (Dean of Faculty of Medicine), Drs. H. S. Newland and T. G. Wilson on behalf of the University of Adelaide; Professor W. A. Osborne, Messrs. G. A. Syme and W. Kent Hughes on behalf of the University of Melbourne; Dr. H. Lindo Ferguson (Dean of the Faculty of Medicine) on behalf of the University of Otago; and Professors D. A. Welsh, H. G. Chapman and A. E. Mills, Dr. F. P. Sandes and Mr. H. E. Barff (Warden) on behalf of the University of Sydney. Mr. H. E. Barff was elected to preside over the conference.

The Chairman explained how the conference had arisen from the recent meeting of representatives of Australian Universities which had led to the formation of an Inter-Universities Standing Committee. Subjects of importance in medical education had been discussed at this meeting. It was felt that advantage should be taken of the opportunity afforded by the visit of the Australasian Medical Congress to Brisbane to arrange for a special discussion concerning the medical curriculum.

The conference devoted its attention in the first place to the subjects of the preliminary examination. Sir Joseph Verco pointed out that the practice which had been followed in Adelaide, of leaving the student to obtain his knowledge of chemistry, physics and biology at school before entering on his course at the University, had not been entirely satisfactory. The discussion showed that it was the opinion of the meeting that instruction in chemistry, physics, zoology and botany should be given at the university; that it was desirable that the student should commence the study of chemistry and physics at school, but that it was doubtful whether any benefit would result from changing the character of the entrance examination. Stress was laid on the facts that education at school should be general, not specialized, and that the course of study at the university was not usually selected until the student was about to enter its portal. The following resolution was carried unanimously:

> That the first year of medical study be devoted exclusively to the preliminary sciences of physics, chemistry and biology and that the standard in physics and chemistry be such as presupposes an elementary knowledge acquired at school.

It was then agreed that students of medicine needed special courses of instruction in these sciences in which the syllabuses should be drafted with a bias toward medical knowledge. The following resolution was passed unanimously:

> That special consideration should be given to the drafting of a syllabus of the preliminary science teaching which the faculty deems it necessary the university should provide for the special needs of the medical curriculum.

A long discussion took place on the length of the curriculum. It was generally felt that the course of five years did not allow sufficient time for study in those subjects which had grown in recent years of greater importance. It was mentioned that an expansion of the course might entail a hardship upon Australian students if the course was longer than that in Great Britain, but it was pointed out that Australian students would have an advantage from their better training. There was much difference of opinion as to whether the extension should be for two or three terms. Finally the following resolution was carried by a majority:

That the length of the medical curriculum be increased to six years.

The members of the conference were unanimous, however, that the curriculum should be increased by, at least, two terms and it was decided to add this fact as a rider to the resolution concerning the length of the curriculum.

It was decided to leave the time of holding examinations and the allotment of time for subjects to the individual universities, but the following two resolutions were passed unanimously:

That the courses in anatomy, physiology, bio-chemistry and pharmacology occupy the second and third years of medical study; and

That there be a course of practical clinical physiology dealing with physical and chemical diagnostic methods and under the direction of a practitioner of medicine.

The conference expressed the opinion that similar meetings should be held every second or third year to afford an opportunity for the exchange of views.

At a meeting of the Senate of the University of Sydney held on September 6, 1920, the degree of Master of Surgery was conferred *in absentia* on C. H. Wesley.

The resolutions of the conference of August 31, 1920, were noted and referred to the Faculty of Medicine for consideration and report.

THE STATE CHILDREN OF NEW SOUTH WALES.

The State has a grave responsibility in making provision for the care of young children whose welfare is endangered on account of the absence of sufficient parental control. In every civilized community this duty of the State is governed by legislative enactments. The object of these laws is in part sociological and in part hygienic. The infant mortality, as well as the morbidity of children and of young adults, can be beneficially influenced by suitable provision of guardianship. The mental and to some extent the physical health of the community can be improved by the recognition of abnormal mentality in children and by the exercise of proper control of delinquents. The children's Acts, moreover, are intended to prevent, as far as possible, the spread of certain contagious diseases and to eliminate to some extent the precursors of vicious tendencies, such as prostitution, alcoholism and the like. For these reasons the medical profession has a wide interest in the methods of control and in the manner of the administration of the various laws dealing with State children. For many years the Honourable Sir Charles Mackellar, K.C.M.G., M.L.C., has endeavoured to direct the attention of the Premier of New South Wales to various difficulties arising in consequence of the faulty methods of treatment of adolescent delinquents. Sir Charles Mackellar was, until about six years ago, the President of the New South Wales State Children's Relief Board. In this capacity he had frequent cause for complaint concerning the manner in which certain officers in the Department of Public Instruction opposed the policy adopted by the Board of segregating the mentally deficient, the viciously disposed and the criminal from normal minor offenders. As a result of these complaints the Premier of New South Wales instructed Mr. G. Mason Allard to extend an inquiry which he was then conducting, to the question of the administration of the four Acts which govern the activities of the State Children's Relief Board. Mr. Allard has now submitted his report, a document of 48 pages. The report has been based on a prolonged but superficial inquiry and the Commissioner has permitted the evidence of the officers of the Department of Public Instruction against whom complaints had been made, to influence him in arriving at certain very drastic conclusions.

During the past few years there have been many examples of one-man Royal commissions which should teach Australia the futility of adopting this expedient. Formerly in Great Britain a Royal commission was regarded as an excellent burying-place for a grievance. The machinery was heavy, slow and inflexible. By the time the report was issued, the instigators were frequently resting in their graves. There were, of course, many striking exceptions, but in every case in which a Royal commission performed signal service to the community the commissioners were selected on account of their competence and high integrity and all evidence of importance was carefully weighed and correctly evaluated before deductions were drawn. We have but to instance the McClintock Hospital Commission in Tasmania, the Judge Ewing Ratten Commission and the Liverpool Camp Commission, to justify our contention that one-man inquiries should be avoided. When it is necessary to investigate a matter of public significance, the persons selected for the task should by previous training and experience be expert in the questions at issue; they should be men or women of sufficient character to render it impossible for any interested party to exercise undue influence on them and they should be possessed of a wide knowledge of the world.

The Royal Commissioner prefaces his report with a general summary of the legislative enactments and of the functions of the State Children's Relief Board. In dealing with the classification of junior offenders and of the homes for their reception, he makes the astounding statement that the cases of certain young offenders concerning which complaints were made by Sir Charles Mackellar, had become too old for him to investigate. In another part of the report, however, he does not hesitate to carry his inquiries back over a period of eleven years. After the new system of adapting the treatment to the child rather than to the nature of its offence had replaced the old penal methods, it was reported that the superintendents of some of the institutions had complained that they were not receiving a sufficient number of the boys who had been committed by the Magistrates in the Children's Court. Mr. Allard calls attention to the fact that this accusation implied that the "institutions were considered by officials to be conducted not so much for the purpose of reforming juvenile delinquents as that these poor children were committed to these places for the benefit of the institution and for the maintenance and expansion of the prestige of their officers." That Mr. Allard regarded this charge as unjustified, does not alter the fact.

Mr. Allard's statement that Sir Charles Mackellar had not been actively engaged in the work for the past six years and had not been in direct touch with the treatment of current delinquents, would be amusing if it were made in any other connexion. We would call attention to the fact that Sir Charles Mackellar by training, experience and natural aptitude is an expert in the handling of delinquent children, while we have yet to learn that the Royal Commissioner has any knowledge whatsoever of the problems involved or of the administrative details which have enabled the New South Wales State Children's Relief Board to become one of the most successful institutions of its kind in the world.

It would serve no useful purpose to summarize the first 14 pages of the report in this place. Sufficient information regarding the subjects dealt with is included in the recommendations of the Commissioner, to which reference will be made.

In the chapter headed "Institutions under Direct Administration of the State Children's Relief Department" the Commissioner endeavours to analyse the classification of the inmates and to deal with specific instances of alleged faulty administration. The Mittagong Farm Homes consist of a number of institutions collectively called an "Industrial School." Mr. Allard quarrels with the Department in regard to the avoidance of the term "reformatory." The conclusions he draws at the end of a long and very inaccurate description of these Homes, is that the classification of the inmates is faulty and detrimental to the best interests of the community. Home No. 1 is a home for crippled boys. According to Mr. Allard, there are 19 inmates, including cripples, juvenile criminals, feeble-minded lads and one distinctly immoral youth. It appears that only three of the inmates are cripples. The Board is not in the habit of producing physical defects in order to fill a home. The so-called juvenile criminals included five boys who had been convicted of stealing. Two of these boys, aged 11 and 12 years respectively, snatched a handbag from a tram-passenger. Two others, each aged 13, stole two horses and harness, went for a ride and then abandoned the horses.

The last child was 14 years of age; he stole a pair of boots from a bedroom and pawned them. The next "juvenile criminals" splashed some red paint on the wall of a new house and wrote some obscene words on it. Their ages were 10 and 11 respectively. The last "criminal" was aged 15 and was committed because he had deceived his mother as to his earnings and had played truant from the night school. The child was committed to an institution at the request of the father, but later, when the father went to hospital, the mother asked the Board to allow him to return to her. In regard to the feeble-minded lads, the Royal Commissioner divulges no power of discrimination between those who without detriment to themselves or other children can be controlled in a home of this kind and those whose companionship is necessarily undesirable.

No. 2 Home is described by Mr. Allard as a "Home for Crippled Girls." In reality, it is a home for girls and young boys other than those boys who are committed by the Court. Mr. Allard takes exception to the inclusion of a boy aged 12. He ignores the fact, included in his tabular statement, that this little individual is paralysed from the waist downwards. As a matter of fact, he has been in this one Home since babyhood and is the pet of the institution. The Commissioner makes a great song about "a case of gross immorality" on the part of one of the girls nearly 16 years of age with a boy aged 10 years. We understand that one night two girls took a boy of 10 years from the boys' dormitory. The boy remained in one of the beds in the girls' dormitory for a few minutes and then returned to his proper quarters. There was no evidence or suggestion of any immorality whatsoever. We learn further that the Matron of this Home has stated that this was the first occasion of any conduct approaching even a semblance of immoral practice during the five years of her service in the Home.

In regard to Home No. 3, Mr. Allard makes the general statement that the grouping is faulty and that State boys who have committed no offence, are housed together with others who have committed various and several offences. Had he inquired more carefully into the state of affairs, he would have learned that the boys who had been committed for offences, were naughty rather than bad and were quite amenable to disciplinary treatment and control. Moreover, some of the inmates were placed in this Home where the dairy business is taught, chiefly because no more suitable accommodation was available elsewhere. His further criticism that a boy convalescent from an attack of acute bronchitis should not have been placed in this Home is obviously invalid, in view of the fact that the behaviour of the inmates has not been of an unsatisfactory nature.

Mr. Allard gives a series of instances in support of his contention that some of the lads had been wrongly admitted to the industrial schools. It has been the practice of the Department to set aside certain of the Homes for boys of the Roman Catholic faith and others for boys brought up as members of the Church of England. Why this classification has been adopted we are unable to state. The religious convictions of parents who neglect their children or who bring them up badly, and of delinquent children to a tender age are not, as a rule, very orthodox. It cannot, however, be held that the classification is illogical. Information is given in regard to a few specific instances. He refers to a boy aged 14, who was sent to the Roman Catholic Home (No. 4) "to which boys are committed from the courts." The Superintendent of the Home thought that it would have been better had the boy been boarded out in a private family. The Board endeavoured on several occasions to find a foster parent residing near a high school for this boy. Owing to the fact that the amount paid for boarded-out children was so low that it did not cover the increased cost of living, a suitable home was not found for this child. The Board had no alternative but to place the child in the Mittagong Home. Mr. Allard regards the treatment of another boy aged 15 as most improper. As it had been found impossible to secure a suitable guardian for this child, the Board admitted him to a Home for boys other than those committed by the Court, where he could learn a trade. Mr. Allard interprets the presence of a few children committed by the Court in this Home as indicating the general character of the Home. The admission of these children, however, was merely a temporary expedient due to the unfortunate congestion of the available accommodation. Mr. Allard criticizes the treatment of a child aged eleven, the subject of club foot. This child had been transferred from one of the Parramatta Cottages Homes "for sick and invalid children." He considered it distinctly unfair to place such a child in association with many persistent offenders. It appears that this child had been under surgical treatment and that the surgeon in attendance applied to the Board for educational facilities to be given to the child. As the distance between the Parramatta Home and the school was too great for this little cripple, the President of the Board transferred him to one of the Mittagong Homes situated in close proximity to the school. In this Home there are no boys over 13 years of age and the child receives excellent and most sympathetic attention. The detriment of association with persistent offenders is a myth.

(To be Continued.)

THE REGISTER OF THE GENERAL MEDICAL COUNCIL.

In the *British Medical Journal* of July 31, 1920, is published, at the request of the General Medical Council, a list of names of medical practitioners who have not responded to the inquiries of the Registrar of the General Medical Council, made under Section 14 of the *Medical Act, 1858*. It is provided that if no answer to a letter of inquiry from the Registrar be received within six months, the name of the person addressed may be removed from the Register. The following is a list of Australian practitioners registered on the Colonial List who have not responded to the inquiries of the Registrar:—

Abbott, Nigel Basil Gresley, M.B., Adel., 1916.
Birrell, William Alexander Hamilton, M.B., Melb., 1915.
Black, Geoffrey Howard, M.B., Adel., 1916.
Blashki, Eric Phillip, M.C., M.B., Syd., 1915.
Bretherton, Albert Wilber, M.B., Melb., 1915.
English, Robert Joseph, M.B., Syd., 1909.
Fleming, Thomas Gordon, M.C., M.B., Adel., 1909.
Fraser, Alexander Clow, M.B., Melb., 1915.
George, Thomas Edwin, M.B., Melb., 1912.
Griffiths, Ada Isabella Valentine, M.B., Melb., 1905.
Hartridge, Oliver Keith, M.B., Melb., 1912.
Hawthorne, William Stuart, M.B., Syd., 1916.
Jeffries, Lewis Wibner, O.B.E., M.B., Melb., 1907.
Kneebone, John Le Messurier, M.B., Adel., 1911.
McCaffrey, Ernest Moore, M.B., Syd., 1916.
McDonald, Sydney Fancourt, M.D., Melb., 1913.
O'Leary, Ralph Daniel, M.B., Melb., 1906.
Purves, Allan Melrose, M.C., M.B., Syd., 1909.
Rutter, John Hemphill, M.B., Melb., 1907.
Sleeman, James Garnet, M.B., Melb., 1915.
Thompson, William Barbour, M.B., Melb., 1913.

Books Received.

THE SHIBBOLETHS OF TUBERCULOSIS, by Marcus Paterson, M.D.; 1920. London: John Murray. Sydney: Angus & Robertson, Limited; Demy 8vo., pp. 227. Price, 12s. 6d.

THE ESSENTIALS OF HISTOLOGY, DESCRIPTIVE AND PRACTICAL, FOR THE USE OF STUDENTS, by Sir E. S. Shafer, F.R.S.; Eleventh Edition; 1920. London: Longmans, Green & Company; Demy 8vo., pp. 577, with 720 illustrations. Price, 14s. net.

EXOPHTHALMIC GOITER AND ITS NON-SURGICAL TREATMENT, by Israel Bram, M.D.; 1920. St. Louis: C. V. Mosby Company; Royal 8vo., pp. 438. Price, $5.50.

THE FUNDAMENTALS OF HUMAN ANATOMY, INCLUDING ITS BORDERLAND DISTRICTS: From the Viewpoint of a Practitioner, by Marsh Pitzman, A.B., M.D.; 1920. St. Louis: C. V. Mosby Company; Royal 8vo., pp. 356, with 101 illustrations. Price, $4.

THE BRADSHAW LECTURE ON THE SURGERY OF THE HEART: Delivered before the Royal College of Surgeons, December 11, 1919, by Sir Charles A. Ballance, F.R.C.S.; 1920. London: Macmillan & Company, Limited; Demy 8vo., pp. 154, with 48 illustrations. Price, 10s. 6d. net.

WILLIAM SUTHERLAND: A BIOGRAPHY, by W. A. Osborne; 1920. Melbourne: Lothian Book Publishing Company, Proprietary, Limited; Crown 8vo., pp. 102, illustrated. Price, 7s. 6d. net.

CHIRURGIE RÉPARATRICE ET ORTHOPÉDIQUE, TOME PREMIER, TOME SECOND, by many authors; 1920. Paris: Masson et Cie; Royal 8vo., pp. 659 and 635, with many illustrations. Price, 80 francs net each.

Proceedings of the Australian Medical Boards.

VICTORIA.

The undermentioned have been registered, under the provisions of Part I. of the *Medical Act, 1915*, as duly qualified medical practitioners:—

Michael James Burns, M.B., B.S., B.O.A., Natl. Univ., Irel., 1916; High Street, Eaglehawk.
Edward Burton Gunson, M.B. *et* Ch.B., 1910, M.D., 1911, Edin.; 58 Collins Street, Melbourne.
Charles Clarke Macmillan, M.B. *et* Ch.M., Edin., 1897; Bank of New South Wales, Collins Street, Melbourne.
John McNaught Scott, M.B. *et* Ch.B., Glas., 1910; Mortlake.

The following names of deceased practitioners have been removed from the Register:—

William Scott Watson.
George Richmond Moore.
Michael Stanislaus McSweeney.
Alexander Bruce Bennie.
Alfred Otto Bobardt.
James Buick.
Alfred Raymond Fox.
Johnston Hughston.
Charles Roy Lister.
William Rogerson.

QUEENSLAND.

The undermentioned have been registered, under the provisions of *The Medical Act of 1867*, as duly qualified medical practitioners:—

Rees Frank Llewellyn, M.B., Univ. Syd., 1902; Ipswich.
Harry Clarendon Whittle, M.B., Ch.M., Univ. Syd., 1920; Croydon.

In our issue of September 25, 1920, page 330, the year of graduation of Dr. W. A. Bowman was erroneously given as 1920. It should have been 1915.

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xxvii.

Sydney Hospital: Honorary Assistant Dermatologist. Honorary Assistant Radiographer.
Camooweal Cottage Hospital, Queensland: Medical Officer.

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
NEW SOUTH WALES. (Hon. Sec., 30-34 Elizabeth Street, Sydney.)	Australian Natives' Association. Balmain United Friendly Societies' Dispensary. Friendly Society Lodges at Casino. Leichhardt and Petersham Dispensary. Manchester Unity Oddfellows' Medical Institute, Elizabeth Street, Sydney. Marrickville United Friendly Societies' Dispensary. North Sydney United Friendly Societies. People's Prudential Benefit Society. Phœnix Mutual Provident Society.
VICTORIA. (Hon. Sec., Medical Society Hall, East Melbourne.)	All Institutes or Medical Dispensaries. Manchester Unity Independent Order of Oddfellows. Ancient Order of Foresters. Hibernian Australian Catholic Benefit Society. Grand United Order of Free Gardeners. Sons of Temperance. Order of St. Andrew. Australian Prudential Association Proprietary, Limited. Mutual National Provident Club. National Provident Association.
QUEENSLAND. (Hon. Sec., B.M.A. Building, Adelaide Street, Brisbane.)	Australian Natives' Association. Brisbane United Friendly Society Institute. Stannary Hills Hospital.
SOUTH AUSTRALIA. (Hon. Sec., 3 North Terrace, Adelaide.)	Contract Practice Appointments at Renmark. Contract Practice Appointments in South Australia.
WESTERN AUSTRALIA. (Hon. Sec., 6 Bank of New South Wales Chambers, St. George's Terrace, Perth.	All Contract Practice Appointments in Western Australia.
NEW ZEALAND: WELLINGTON DIVISION. (Hon. Sec., Wellington.)	Friendly Society Lodges, Wellington, New Zealand.

Diary for the Month.

Oct. 2.—N.S.W. Branch, B.M.A., Annual Meeting of Delegates of Local Associations with the Council (second day).
Oct. 5.—N.S.W. Branch, B.M.A., Council (Quarterly).
Oct. 6.—Vict. Branch, B.M.A..
Oct. 8.—N.S.W. Branch, B.M.A., Clinical.
Oct. 8.—S. Aust. Branch, B.M.A., Council.
Oct. 12.—Tas. Branch, B.M.A..
Oct. 12.—N.S.W. Branch, B.M.A., Ethics Committee.
Oct. 14.—Vict. Branch, B.M.A., Council.
Oct. 14.—Q. Branch, B.M.A., Council.
Oct. 15.—Eastern Suburbs Med. Assoc. (N.S.W.).
Oct. 15.—Central Southern Med. Assoc. (N.S.W.).
Oct. 16.—Northern Suburbs Med. Assoc. (N.S.W.).
Oct. 19.—N.S.W. Branch, B.M.A., Executive and Finance Committee.
Oct. 20.—West. Aust. Branch, B.M.A..
Oct. 26.—N.S.W. Branch, B.M.A., Medical Politics Committee; Organization and Science Committee.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated.

All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney. (Telephone: B. 4035.)